



DEVELOPMENT

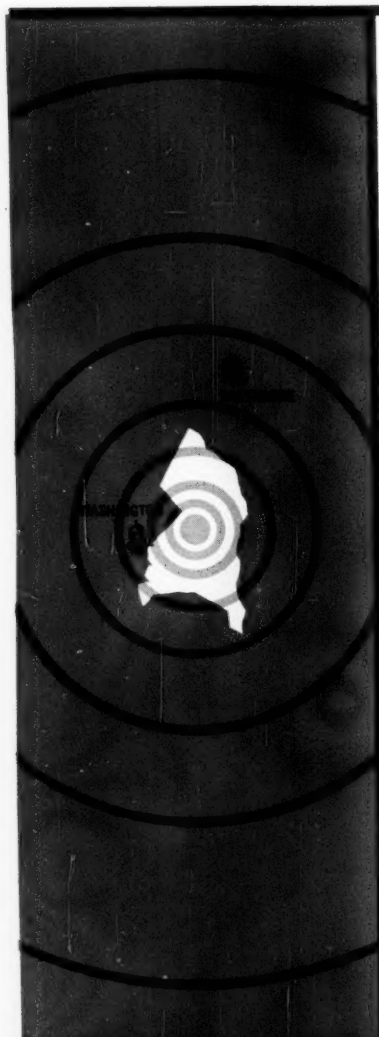
THE INTERNATIONAL GUIDE TO INDUSTRIAL PLANNING AND EXPANSION



Woolworth President Robert C. Kirkwood (right) tells the story, beginning on page 11, of his company's development. Strolling with him are (l. to r.) H. B. Wright, P. E. Hutchins, C. M. Purdy and L. P. Kilpatrick, executives of one of Woolworth's district operations.

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March 8, 1960

Mr. T. Howard Duckett, Chairman
Prince George's County Industrial
Development Committee
Prince George's County Chamber of Commerce
5132 Baltimore Avenue
Hyattsville, Maryland

Dear Mr. Duckett:

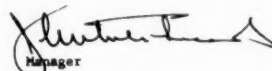
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JLWhitehead /dlg

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Chamber of Commerce Building, Hyattsville, Maryland

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INDUSTRIAL

DEVELOPMENT

AND MANUFACTURERS RECORD

VOLUME 129 • AUGUST 1960 • NUMBER 9

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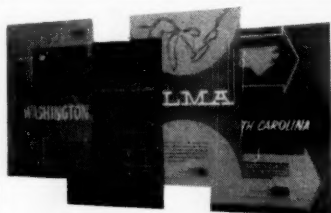
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CHECK POINTS

Pursuing industrial development programs can lead to some strange places and unusual situations. For example, one day in June we found ourselves dodging towering cumulus build-ups off the North coast of Colombia, en route to Panama. Miles from land, out of radio range, our single-engined Cessna was our only link with the civilized world.

Parallel with our course was the dense jungle which joins Colombia and Panama: one of the more forbidding areas of the hemisphere. Scores of men have lost their lives hacking out survey routes. Torrential rains fall throughout the year. This is the region through which the Pan American Highway has not yet been pushed; where they say a strong man can move a mile a day with a good machete. Only a few primitive indian tribes compete with the animals and insects for survival.

Making our landfall on the rugged South coast of the Isthmus we flew for a hundred miles along a beautiful slope marked only by an occasional thatched village of San Blas Indians. Soon we picked up a friendly radio beacon in the Canal Zone and were steered to a landing at Tocumen — back into the world of economics, engineering, and politics.

We were on a quick swing through some 15 Caribbean-Gulf-Community nations to probe opportunities for expanding U. S. firms, to gain background on organized development programs, and to identify the men and groups best able to assist in exploring such opportunities. Our flight took us from Miami down through the Bahamas to Inagua, then to Haiti, Dominican Republic, Puerto Rico, the Virgin Islands, the Leeward and Windwards, Trinidad, Venezuela, Aruba, Colombia, the Central American Republics, and Mexico.

Altogether, we interviewed nearly a hundred government officials and business leaders. We talked to men ranging from head of state, cabinet ministers, and legislators, to manufacturers, newspaper editors, and chamber of commerce executives. Our contacts talked freely, frankly, and — in many cases — bluntly. Here are some general conclusions:

1. Economic colonialism faces the same fate as political colonialism. No longer do underdeveloped nations welcome with unreserved enthusiasm the "foreign" investment. Today the greatest interest is in joint ventures which involve at least some participation by local money and people.

2. Our fellow Americans to the South (and they don't let you forget that all citizens of the hemisphere are Americans) feel we've slighted them in our foreign aid programs. They don't want handouts, but they have a great appetite for technical aid and development loans.

3. Most Latin contacts and all U. S. citizens living in the area feel the get-tough policy toward Castro in Cuba is long overdue. Rival sugar-producing nations can see no reason for the U. S. to buy from an antagonist when friends are ready and willing to meet our needs.

4. There are numerous evidences of the flight of Cuban industry from the Castro regime. Cuban interests were found to be purchasing sites and plants in several Central American countries, quietly making plans to move their operations.

5. There are organized industrial development programs in almost all countries, most of them established with the aid of U. S. advisors. In general, these programs are 10 years behind typical U. S. area programs in terms of trained personnel and techniques, but they are progressing rapidly.

CHECK POINTS

6. The export policies of U. S. manufacturers are roundly criticized both by Latins and U. S. citizens living South of the border. Charges of poor service and inept public relations are too numerous to be shrugged off. We must change our ways immediately if we are to meet the competition from Europe and Japan.

7. Communism is not strong in the region today, but the poverty-stricken, ignorant masses constitute a potential tinder-box. Improvement of the mode of living of these peoples and educating them along democratic lines is the greatest challenge we face in the area.

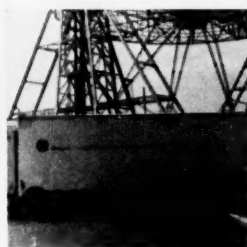
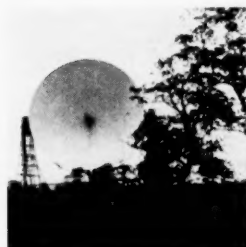
8. Basically, the leading citizens of most of the nations to our South are friendly toward the United States. Everywhere, the visitors sees familiar U. S. names on streets, buildings, billboards, equipment, and on the shelves of the stores.

9. This is a region of enormous opportunity for the U. S. businessman. A sleeping giant lies at our doorstep. That's a story we're going to try to give you in detail in future issues.

* * *

The countryside around Manchester is just what you'd expect in England. Herds of fine cattle graze quietly in green fields neatly separated by hedgerows. At the crossroads there are quaint inns and on Sunday afternoons the roadsides are dotted with picnickers. All is calm and peaceful.

On just such a Sunday we drove out to see the famed Jodrell Bank Observatory, which is operated by the University of Manchester. The gigantic radio telescope is the world's largest, and is the principal instrument for tracking missiles and satellites in deep space. Every time you read a newspaper account of a space probe, you'll find the scope mentioned.



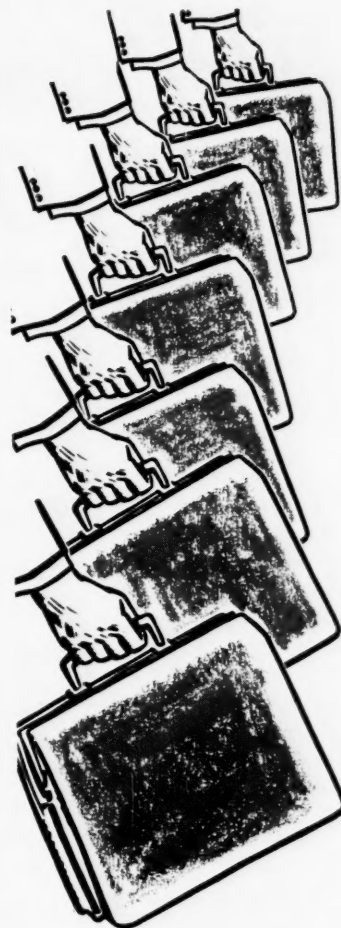
From a mile away, the Jodrell telescope (left) rises above the English countryside. ID Editor's guide and host (center) was Dr. D. R. Chapman, a top scientist in U. S. space program, and long-time personal friend. Unimpressive trailer (right) houses personnel of Space Technology Labs, U.S. contract representative at Jodrell.

We don't mind admitting we were surprised and impressed by the Jodrell facility. Reached at the end of a winding country lane, there was no barbed wire, no guards. Cows grazed peacefully at the base of one of the most important pieces of equipment in the world. Upright, the telescope is a giant radar disc 250 feet in diameter. It can be seen from 10 to 15 miles away in every direction.

At the time of our visit, the scope was tracking the U. S. Pioneer missile, then sending back strong signals from eight million miles away. (That's pretty awesome for a country boy from Georgia). Luckily, the same day the Russians launched their big five-ton space ship, complete with life-size dummy.

To a developer, the significant thing about the Jodrell Observatory is that the world (or should we say universe) will still beat a path to your door if you build a bigger and better mousetrap. The telescope is a private project of the University, bought with local funds. It is a tribute to the imagination of a few scientists and their backers.

—H.M.C.



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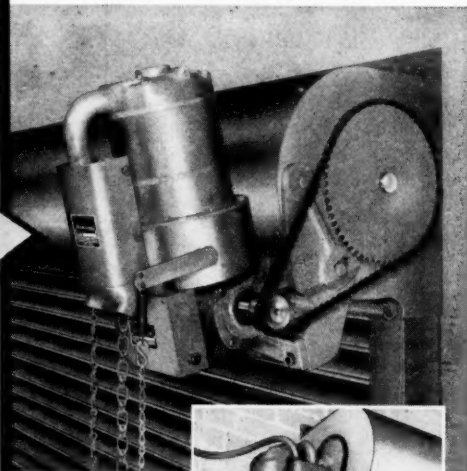
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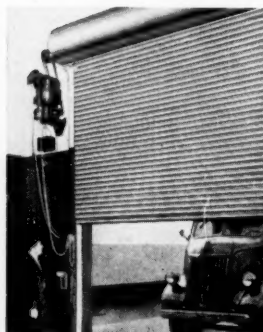
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INDUSTRIAL DEVELOPMENT
LETTERS
MANUFACTURERS RECORD

SIRS: Your article in the May 1960 issue about Northern and Central California was most interesting and informative. I should like you to know that I was also gratified to see a photograph of the IBM plant at San Jose as an example of industrial growth in that area.

For the record, however, I should like to point out that while our facility at San Jose is a very important part of our General Products Division, there are also three others elsewhere in the country, which are associated with that particular phase of our business.

R. D. COURTRIGHT, Manager
Facilities Planning Dept.
International Business Machines Corp.
New York, New York

SIRS: . . . Your special edition really made a hit in North Carolina, and I think will continue to prove very useful in the months ahead.

Incidentally, I do not subscribe to INDUSTRIAL DEVELOPMENT and MANUFACTURERS RECORD and would appreciate your circulation department sending me the necessary information for beginning a subscription. Also, I believe your "Annual Blue Book and Directory" is either off the press or due soon, isn't it?

E. L. RANKIN, JR.
John Harden Associates
Greensboro, North Carolina

► Subscription information furnished. The **BLUEBOOK OF SOUTHERN PROGRESS** is now available at \$3.00 per copy.

SIRS: As an executive of a furniture company whose headquarters are here in Atlanta, I am in charge of finding a new plant site for a payroll of 30 people or more. We are interested in a community in either Georgia or North Carolina which will finance the plant for us.

It has been called to my attention that you have a Registered Audit service which will provide me with background information for investigating possible locations. If possible, I would like copies of all the "audits" you might have in Georgia and North Carolina. I would also like an "audit" for Franklin, North Carolina, if you have it.

Please advise me as to the cost of this service and also the cost of your **BLUEBOOK OF SOUTHERN PROGRESS** . . .

NAME WITHHELD

► All information requested has been furnished.

SIRS: I know I express the sentiment of the other "progress peddlers" in North Carolina in expressing to you and your staff our thanks and sincere appreciation for the excellent Progress Report on North Carolina which I have just read in the June issue of your splendid magazine.

You are making a substantial contribution to the growth and development of North Carolina and other Southern states. You have my best wishes for continuing success.

HUGH SAWYER
Executive Vice President
Rocky Mount Chamber of Commerce
Rocky Mount, North Carolina

LETTERS

SIRS: Thank you for your thought in sending to my attention a copy of your May 1960 issue of **INDUSTRIAL DEVELOPMENT** and **MANUFACTURERS RECORD** carrying that consensus of opinion on prospects for the continued industrial development of the South.

I was pleased, but hardly surprised, to note how thoroughly your respondents concur with my own predictions.

I enjoyed the opportunity to cooperate in support of your review and wish you all best for continuing success.

LOUIS E. WOLFSON
Chairman of the Board
Merritt-Chapman & Scott Corp.
New York, New York

SIRS: I want most particularly to congratulate you on the article on the banks' role in Industrial Development which appeared in your last issue. The subject was extremely well covered and well presented, and I hope that it will induce more banks to take an active role in this field. Having had a chance to look at this "from the inside" I am more than ever convinced that banks can be one of the most effective instrumentalities in area development.

RAEBURN F. HAY
Vice President
First Western Bank
San Francisco, California

SIRS: I have written numerous letters of inquiry concerning a term paper I am writing on financing industrial property through industrial mortgages and sales lease back, and all the replies suggested I contact your organization.

My problem is this. It seems that no company has a library, as such, on these subjects. So information is rather hard to come by. Since you have been the pace setters in publishing articles in this field I am seeking your learned advice.

Would it be possible for me to obtain copies of articles written on these subjects . . .

Further I would like to have information regarding my obtaining a subscription to your publication, **INDUSTRIAL DEVELOPMENT**.

GEORGE STINNETT
4448 Squirrel Road
Birmingham, Michigan

► Articles requested and subscription information forwarded.

SIRS: I must thank you for the very prompt reply to my request for further information on the development of Industrial Parks in the United States and for the copies of **INDUSTRIAL DEVELOPMENT** which you kindly forwarded.

The development of the Industrial Park movement in the United States was of considerable interest to me . . . when on the . . . tour that I did of the eastern United States I saw some of the industrial parks being developed.

Here we are a very young country, in fact less than 70 years old, and I feel that we could learn much from your experience in the United States and I hope I will be able to continue correspondence with you from time to time particularly in industrial matters as this problem arises.

K. K. PARKER
Chief Town Planning Officer
Government of Southern Rhodesia
Salisbury, Southern Rhodesia

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Helping Develop Alabama

Birmingham 2, Alabama

COMPETITION

A MORE SIGNIFICANT FACTOR

As you study the factors which will govern the selection of sites for future facilities, don't overlook the increasing importance of competition for new materials and specialized manpower. The patterns of supply which existed yesterday may be distinctly different tomorrow.



IN THE SIXTIES

By David H. Dawson

The urge to prophesy is a minor vice usually indulged in by businessmen around the first of each new year. But at the turn of this new decade it seems to have reached bacchanalian proportions. I doubt that any decade has received so much advance billing.

It seems to have inspired new heights of optimism — to say nothing of alliteration. We have read about the "Soaring Sixties," the "Sky-rocketing Sixties," and even the "Sizzling Sixties."

All of these terms invoke a spirit of excitement, strongly tinted with profit, but I wonder if they may not, at the same time exert a lulling effect on businessmen. The implication seems to be: relax; enjoy it; let nature take its course.

Before we relax to the point

where it is difficult to get moving again, it might be well to examine the basis for the rosy pigmentation. As nearly as I can determine, it rests on three considerations — first we have had ten very good years in the Fifties; second, there are going to be a lot more people around to consume goods; and third, there are no really threatening economic or political clouds clearly visible.

I would question none of these. There is no basis for disputing the prognostication that the population will increase 16 per cent in the next decade. It is as sure as anything can be in an unsure world that there will be a 52 per cent increase in the 18- to 24-year-old group. Based on experience as old as time, there is little reason to doubt these young people will want to marry

and establish households of their own.

I am somewhat more inclined to question the further assumption that these conditions will automatically set the Sixties to soaring, or to make them fabulous or even golden.

I am still less certain that it is safe to project even the more conservative forecasts to smaller segments of the economy — such as the chemical industry, or the plastics industry. It seems completely unrealistic to assume that whatever happens to the over-all economy, or even to one's own industry, will inevitably befall our own individual business.

Such an analogy completely leaves out a basic fact of life in commerce — that inevitably some

COMPETITION

other fellow is after the business we have or hope to have.

The best assumption to make would be that in the Sixties we can expect in the plastics industry a continuation of the trends of the Fifties — and they were very good years indeed. While total manufacturing increased at a rate of four per cent annually, and the chemical industry increased 6.6 per cent per year, the output of raw materials for the plastics industry grew at a rate of 13 per cent — three times as fast as all manufacturing and twice as fast as the chemical industry.

To maintain that growth alone will take some fancy "soaring."

Another assumption which can be safely made is that such a growth will be accompanied by change, particularly in methods of marketing. As our industry matures and its products become ever more sophisticated, we can expect to see more aggressive market development, and more and more emphasis on the technical phases of selling — on design and on sound engineering. To each of us will come the choice: to change, and to grow as a result of change, or to stand pat and watch others grow past us.

The third assumption follows as a consequence of growth and change — the decade of the Sixties will be competitive, nowhere more so than within the plastics industry and between this industry and the producers of conventional materials of construction.

It is to some of the aspects of competition facing this industry that I would like to direct attention. In what areas will the pressures be greatest? How can individual companies respond so that competition helps rather than hurts? Are there areas where competition, instead of acting as the constructive, stimulating influence it should be, can become the reverse and hence hinder the progress of the industry and you who make it up?

Four Major Areas

To start let's look briefly at four major areas where competition in the Sixties may be expected to become most acute.

First, is the area of manpower. There will be talent hunts far surpassing anything we have seen to

date. The plastics industry generally has escaped the technical manpower shortage, but as processors place more and more emphasis on the technical aspects of the business, they, too, will inevitably be searching for the young men who will stimulate growth and provide the ideas.

Despite the advertised population explosion, the increase in the 25- to 44-year age group — where the bulk of our creative powers in research, marketing and management will be found — will amount to less than one and a half millions. What we will be attempting to do is to meet the needs in 1970 of a 16 per cent greater population with only three per cent more creative people.

Staffing our expanding businesses may approach the kind of competition major league ball teams engage in for the affections of a schoolboy southpaw with a hard fast ball. To get our share in the plastics industry will require planning and effort, and a willingness to make jobs in the plastics industry more challenging and rewarding than in competitive fields.

A second area where competition will almost certainly grow tougher is between various engineering and construction materials. Through its ability to modify properties of its various materials to satisfy different end uses, the plastics industry has made remarkable strides in markets traditionally reserved to older materials. We have seen cellophane and polyethylene take over applications once the sole province of paper, polyvinyl chlorides replacing leather, formaldehyde resins for metal, and polyethylene for tin plate and glass. The end is not in sight, for these products have advantages in appearance and physical properties which will carry great weight in the continuing battle.

The producers of other materials are not going to sit idly by while markets are taken away. The easier and more obvious replacements have already been made. From this point on it is bound to get tougher. Already the response has become more aggressive. Aluminum and stainless steel are making strides back in the appliance business. In a speech to can manufacturers recently, Mr. Blough, of United States

Steel, predicted a cheaper, lighter weight tin plate. You will quickly appreciate what this could mean.

Inevitably such counter-moves will demand even greater efforts from the plastics industry in product design, cost reduction and in more effective marketing and promotional techniques. Most of this effort must be supplied by individual companies in the daily battle of the market place.

Some are susceptible to an industry approach. The society of the Plastics Industry has already taken constructive action against obsolete building codes and restrictive legislation. It has fostered standards based on sound principles of design and construction, and generally it has worked effectively to build acceptance of plastics by the public.

Competition For Raw Materials

Another area where competition will grow tougher and more intense is between the suppliers of raw materials and between the materials themselves. There are today no fewer than 60 chemically distinct types of plastics; there are 13 producers of polyethylene; 12 producers of polyvinyl chloride and six manufacturers of polystyrene. Our company, for example, makes 22 different basic formulations of polyethylene. Their efforts to produce better products and to devise new ones will continue to increase, and can only result in a wider and more difficult choice for the processor.

To some extent, this competition may seem to be beyond the control of the processor; in some respects it certainly is. It is to a great extent in the hands of the chemist seeking materials of lower cost and greater utility. But the mere existence of such a range of materials, old and new, involves the fabricator, too, in a competitive battle — to use the best adapted material for each of the almost infinite applications looming up. If he fails to do so, he will weaken plastics in their continuing competitive struggle with other materials.

Of perhaps equal or greater importance, if he fails to do so, his wiser and more foresighted competitor down the street may have his business before he realizes that

there is a new material more effective for the particular application. The competitive struggle between the producers of plastic materials will serve only to make more intense the tough competition within the plastics industry, but will at the same time serve as a substantial lever in efforts to widen and increase product applications.

However, none of this will be accomplished if the fabricator sacrifices quality to compete. If he lets quality slide, he will force his supplier in the same direction. In its effort to sell plastics in place of other materials, the industry is unavoidably exposed to the stigma of producing the second-best. Only the strongest emphasis on quality will avoid this danger, and allow the industry to reach the stature it deserves.

The fourth area of competition is somewhat less reassuring than the three already discussed. That is the increasing specter of competition from abroad. In the Fifties, at least until the last several years of that decade, foreign competition in most of our manufacturing industries has been of limited importance. Our export markets were hungry and growing, and the loss of minor fragments of domestic markets to imports did not seem too serious. Perhaps we were lulled into a quite unjustified complacency.

Now it becomes increasingly clear what has been going on. Western Europe, Japan, probably Russia and China as well, have been rebuilding their production facilities. In doing so, they have had access to much of American technology. And they have been building for more than small domestic markets — they have been building for new concepts of common market groupings — and for export — to the rest of the world, including us. In so doing they have removed from us some sizable portion of our two major advantages — advanced technology, and large scale. And to date, at least, they have retained their own advantage of low labor rates — from one-half to one-tenth of those prevailing in this country.

I propose no solution to this dilemma. I merely call attention to it, observing that, although it may not now seem to be of critical importance, the trends of the past few

years may make it critically important before the Golden Sixties draw to a close — and that it could even tarnish some of the glitter of this decade. If, as some will argue, it can be solved only if labor rates and living standards are brought into equilibrium, at least in the industrially advanced parts of the world, the threat to United States business levels of the Sixties may be even greater.

These then are four major areas where we can expect the competition of the Sixties to be tough, aggressive and complicated. In all, except perhaps the last, the impact of that competition should be healthy for the progress of the plastics industry, its suppliers, its

one-time basis; but in many cases it may be wise. Wise, obviously, from the broad point of view of the industry where any misplaced use of plastic materials will inevitably react to the disadvantage of other applications. But wise, also, from the individual point of view — because you are not building soundly for a continuing future, and because it is essentially a mis-use of efforts and facilities, which cannot simultaneously be working on temporary gimmicks and on surely based, continuing new applications.

This is not to say that there is no place in the plastics industry for aggressive merchandising, alert advertising, and vigorous promotion. On the contrary, they will be-

With Du Pont since 1933, Dr. David H. Dawson has had wide experience in research, production and sales in many of the company's departments, and he is now vice president, a director, and member of the executive committee of the company. He also is a member of the board of Remington Arms Company, a Du Pont subsidiary. Active in the Manufacturing Chemists' Association, Dr. Dawson is a member of the board of that organization and chairman of its executive committee. He also is a member of the American Chemical Society, belongs to a number of honorary engineering and professional fraternities, and is a leader in civic and charitable affairs. A native of Philadelphia, Dr. Dawson is a graduate of Drexel Institute of Technology and received his Ph.D from Ohio State University. The accompanying report is from an address he made recently before the Society of the Plastics Industry in Miami Beach.



DAVID H. DAWSON

customers, and for the public and the economy broadly.

It would be more than presumptuous for me to attempt to offer detailed advice on how this industry and its component parts should conduct itself in view of the rough and tough competition which you face in this decade. But I suppose I may be permitted to express some generalities which may be appropriate.

First, it could be urged that selling emphasis have always the long view — that it should be on the basis of performance and economics, with a minimum of emphasis on the gimmick and the gadget. It is never easy to pass up a piece of business, even though it be on a

come increasingly essential as the competitive tempo rises. But they should be applied to soundly engineered, imaginatively designed and economical products which compete with the materials they replace on the basis of performance, appearance and design, and not solely on novelty, and not solely on price.

Next, I would like to observe the importance of building a sound financial structure, capable of adapting itself to the rapid technological changes which are probably coming. These may well be expected to face the industry with rapid obsolescence of equipment and machines. That, too, is good, but if prepared for only by the meager depreciation allowance of the tax laws, it

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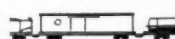
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may present some rather acute problems of financing future changes. Whether tax-deductible or not, the technical obsolescence of plant and machinery is a cost of doing business which, if not provided for, will surely limit future growth.

Third, is the need for enlightened and ethical personnel practices in view of the competition for the younger, more creative people who will be needed. That requires adequate compensation, good working conditions, preferably the use of some form of incentive compensation, but most of all continuous effort to employ able people to the fullest extent of their capabilities. It means preferably developing your own skilled people, and avoiding luring them away from other industries or your competitors, who then have no choice but to reply in kind.

The fourth point I should like to ask you to consider is the need to maintain your own technical and development effort at a high level, and to increase this activity consonant with the growth and potential of your industry.

In view of the extent to which research and development have shown signs of growing into the sacred cow of American industry, this may seem superfluous. But the plastics industry is subjected to a very real danger in that you may be tempted to permit your suppliers to carry that burden. It has happened in other businesses, and usually not to their advantage. I have no doubt that others in the industry — suppliers and perhaps equipment manufacturers — would be willing to do so, certainly they mount large efforts along these lines now. So much the better for you — provided only that you do not allow them to substitute for your own technical efforts.

Only you have the direct contact with your customers and the consequent knowledge of their needs and your opportunities; only you have the detailed knowledge and control of manufacturing costs; only you are in a position to bring technical effort to bear on the critical areas and expand your markets most effectively. To lean on your suppliers excessively is to sap the creativity of your industry, and in the end to relegate it to a routine operation

which would seriously limit its profit-making capabilities.

Finally, I should point out that our present highly competitive free-enterprise economic system can exist only so long as our elected representatives choose to permit it. If we think it is good, we must also convince them that it is. If we see inroads being made in its freedom, we must counter them to the best of our ability — by words and arguments, and by our own business conduct.

If we are threatened with legislative obstacles to the proper functioning of the system, we must be willing to oppose them by all legitimate means. The arguments about businessmen in politics really are ones of tactics — to a major extent politics and government are synonymous, and business is controlled by law, and laws are made by government. We are in politics whether we like it or not, and the debate is about how, and when, and where.

I would like to say one final word about competition in the Nineteen Sixties. I have in mind a fifth and perhaps most important kind of competition. That is, the competition of ideas. The ideas of freedom, which have been the driving force behind our economic development, will continue to do battle in the court of world opinion with the ideas of state control, socialism, communism, dictatorship, authoritarianism.

We will find arrayed against us zealous, dedicated antagonists abroad. At home there will continue to be a large body of opinion which would dilute the strength of our free economy by seeking even more regulation, control, and fractionization of business.

Our responsibilities as American citizens and businessmen do not cease when we have manufactured, sold and delivered a certain quota of goods. It is up to us, each of us, to maintain constant vigilance, to speak out clearly against these forces that would limit our nation's freedom. Above all others, we should know that a strong America needs healthy, dynamic, competitive industry; we should be alert to the attempts to weaken it; we should be prepared to defend it in the struggle for men's minds.



COVER STORY

UBIQUITOUS WOOLWORTH: BUILDS BIG ON SMALL CHANGE

Through new merchandising concepts and careful planning for locations to reach the remotest markets, Woolworth is carrying forward a worldwide expansion program. The company's scientifically designed distribution network, including large warehouses and dispatching installations, makes possible the miracle of delivering as many as 46,000 different items of merchandise across the counter of one well-staffed variety store.

By Robert C. Kirkwood

Woolworth's is the fourth largest retail merchandising organization in the country, excluding the grocery chains. Except, possibly, for the mail order companies, it is the only merchant doing business in each of the Continental United States and Hawaii — and with the opening of our first store in Alaska early this fall, we will have stores in every state of the Union and every province in Canada, and in Puerto Rico and Cuba.

Woolworth's is, of course, the granddaddy of the variety store concept and last year's volume represented around one-third of the national variety store companies and was slightly larger than the combined volume of its two largest competitors. These figures cover the New York and Canadian corporations only and exclude the sales of our 52.7 percent owned English sub-

sidiary and our 97 percent owned German subsidiary, both of which occupy dominant positions in their own areas.

Domestic operations, which include the United States, Hawaii, Puerto Rico, Canada and Cuba are conducted through eleven divisions embracing 2,221 stores with a total personnel of 87,000, an aggregate floor space of 21,467,799 square feet and total counter space of approximately 2,691,491 linear feet or about 510 miles of display counters. In addition, we have four warehouses with about 915,000 square feet.

At the year-end, 1,233 or 55 percent of our stores were self-service; this is five times as many as we had five years ago. The 521 shopping center stores, all of which have been opened in the last nine years, represented 23 percent of our total stores but have 26 percent of our

total floor space. There is no other company in America with as many stores in shopping centers as ours. The number of items making up our merchandise line vary from about 12,000 in the typical small store of 12,000 square feet to 46,000 in our largest stores of some 60,000 to 65,000 square feet. The items range in price from pennies to one hundred dollars.

A listing of our departments will give you a fairly clear idea of the breadth of our line: Confectionery, Cookies and Food Specialties, Hosiery and Footwear, Ladies' Accessories, Millinery, Ribbons and Laces, Window Accessories and Rugs, Dry Goods, Art Goods, Notions, Jewelry, Stationery; Occasional Furnishings (Indoor and outdoor) Barbecue Items — Fishing Tackle — Luggage — Cameras and Supplies; Novelties, Music Department,

WOOLWORTH

Housewares, Toys, Books, Ornaments and Decorations; Horticultural Supplies — Pets and Pet Supplies; Household Sundries, Toilet Articles, Hardware and Wire Goods, and Soft Drink and Lunch Department.

We are the largest restaurant operators in the country, not only in number of units but also in sales volume, and seven out of every ten of our stores have lunch counters or cafeterias.

All told last year our cash registers rang close to one billion times to record sales of slightly less than \$1 to each customer. Our company has turned in sizable profits in every year since its incorporation in 1911. We have an unbroken 48-year

town locations vs. shopping centers, etc. Different people in the variety store field have different views and I wouldn't think of trying to speak for the field as a whole, but we at Woolworth's are convinced that under present conditions, the best over-all company operation should have some of each. In other words, we believe we can best serve the public by having both variety items and soft goods, a broad range of prices and some small stores but more large stores. In our own case, the traditional variety lines have been consistently profitable and I am convinced will continue to be equally worthwhile in the future. They have dependability of demand, minimal seasonal characteristics,

we have begun to expand very substantially our soft lines, particularly wearables for the whole family. This is one of the most important merchandising decisions in the Company's history.

During the last five years we closed 288 unprofitable stores and invested \$185,320,513 in: Opening 488 new stores, Moving 125 stores to new locations, Improving 163 stores in the same locations, and Refurbishing 349 stores.

This total of 1,125 new and improved stores is equal to slightly more than half of the 2,221 stores we had in operation at the end of 1959. In the year just closed, we opened new stores at the rate of one every third working day and remodeled existing stores on the average of one every second working day. On the average, our new stores are 50 percent larger than those opened five years ago. In addition, we have gained desirable floor space through new techniques of layout and fixturing developed by our Research Department; in many instances we have been able to increase selling space as much as one-third within the same four walls.

This has given us increased floor space necessary for broader lines, including an entrance into the soft line field. In several of our stores we are now using up to 35 percent of available space for the display and sale of soft lines which includes a very complete infants' Wear Department, ladies' and misses' lingerie, shorts, slips, blouses, millinery, sportswear, skirts, sweaters, jackets, robes, aprons, gloves, housewear; children's dresses, underwear, outerwear, sleepwear, playclothes; men's and boys' hosiery, underwear, shorts, trousers, slacks, jackets, dungarees and work clothes. Thus, we now in certain stores are in a position to supply all members of the family from infant to adult with an assortment of soft goods with quality, construction and price to meet all competition.

Because the teenage population is growing twice as fast as the total population, we are placing particularly heavy emphasis on the needs of this group.

We are also giving special emphasis to new and expanded lines of
(Continued on page 14)

The President of Woolworth

The chief executive officer of the famous F. W. Woolworth Company is Robert Campbell Kirkwood. He joined the company in his hometown of Provo, Utah, in 1923. Subsequently he managed stores at points in several western states, and in the 1943-48 period he held various positions in the Minneapolis district office, and he was at the Boston office in 1949. The following year Mr. Kirkwood was named assistant district manager of the San Francisco office, then was advanced to the executive office in New York in 1952, and in 1953 became manager of the Boston office. His election to the board of directors came that same year. Named vice president in 1954, he moved up to executive vice president in 1955, and was named president in 1958. Mr. Kirkwood is also a director of F. W. Woolworth & Co., Ltd., England, and of the Irving Trust Company, New York.



dividend record going back to the present company's founding; and a somewhat unique feature of our picture is that we have done no equity financing since the first public offering of our securities almost half a century ago. We do, however, report on our Balance Sheet a long-term debt of about \$127,000,000.

So much for the background, now let's talk about some merchandising concepts which seem to require clarification.

Merchandising Concepts

There is, I believe, considerable misunderstanding in financial circles about the relative profitability of variety items vs. soft goods, low priced items vs. high priced items, small stores vs. large stores, down-

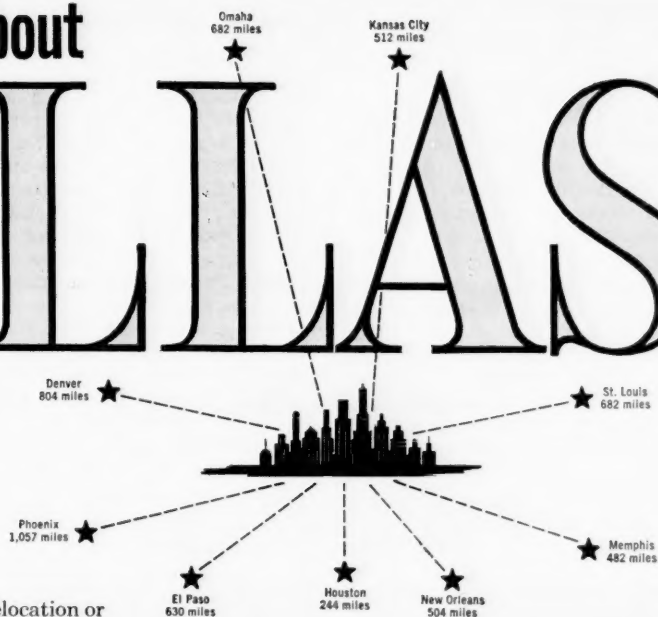
negligible spoilage and obsolescence and most have a high rate of turnover, all of which combined more than compensate for the modest profit margin on the sales dollar.

The traditional variety items are the backbone of our business and we expect them for many years to come to continue to contribute the largest portions of both sales and profits. In short, we want to continue to be the best variety store wherever we are located.

But we do have an important portion of our volume in wearables for infants, children, women and men, and now that we have developed new techniques that permit the effective merchandising of broader lines within economic space limits,

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Dallas offers you unusual opportunities for relocation or expansion. Raw materials and labor are abundant. Markets for your products are readily available. Choice industrial sites are plentiful. So if the following information about Dallas interests you, get in touch with us for more specific details. We'll work with you in strictest confidence.

LABOR: Labor force of 424,100 within Dallas County. Increase in employment of 45% since 1950, and 162% since 1940. Average education 11.8 years in 1950 Census.

POWER: *Electric:* 1,131,000 KW daily generating capacity of Dallas Power & Light Company for City of Dallas in 1960. An estimated 200,000 KW for suburban communities by two other power companies.

Gas: 351 million cubic feet of natural gas delivery capability to Dallas within 24 hour period; supply backed by over 13,000 wells within 200 miles of Dallas.

Fuel Oil: Unlimited commercial supply. Three major pipelines—Mobil, Texaco, and Humble—come into Dallas area.

TRANSPORTATION: The Rock Island and eight other railroads; 32 interstate common motor carriers; 17 intra-state common motor carriers; six airlines; five bus lines.

HOUSING: 118,263 new dwelling units in Dallas County since 1950. Residential suburbs within 13 miles of downtown. Federal Housing Administration data indicates the fourth lowest residential construction costs among major cities. Average rentals, \$20-\$25 per room per month, unfurnished, with partially paid utilities. Sub-standard areas being cleared by extensive freeway program, and areas reclaimed by city renovation program.

THE COMMUNITY: 117 elementary schools averaging 28.7 students per class, and 29 junior and senior high schools averaging 30.2 students per class.

In addition, there are 24 private elementary, and seven private high schools. There are four universities and colleges in Dallas. 115 parks and seven community centers. Eleven major hospitals, and 1,106 physicians

registered with County Medical Association. A city budget of \$2,150,000 for general health and welfare.

Per capita state taxes 13% less than 48-state average, and per capita city taxes 12% less than other cities of comparable size, according to the Bureau of the Census.

COMMERCIAL SERVICES: Based on the Standard Industrial Classification Code, Dallas has 1,954 manufacturing concerns distributed among each industry type, with concentrations of machinery, electronics, fabricated metal products, transportation equipment, and food product firms.

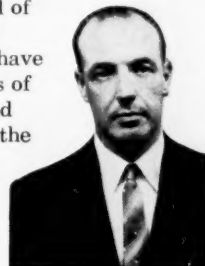
With the exception of manufacturing and retail trade, no economic activity accounts for over 10% of total employment.

Over 200 commercial contractors, including three of the ten largest in the South.

CLIMATE: Average mean temperature: January, 45.8; July, 84.8; annual, 65.9. Average mean rainfall: May, 5.0"; July, 1.7"; annual, 2.8" per month.

The man who knows Dallas industrial sites like the back of his hand is Wayne C. Gault of the Rock Island's Industrial Development Department.

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WOOLWORTH

(Continued from page 12)

footwear, such as, toddlers, staple and seasonal shoes, slippers and casuals; incidentally, in passing it is worth noting that our sales volume in footwear has increased four-fold during the last five years.

In 1959 we enlarged our line of rugs to include room-sized rugs and rolled carpeting for the home. You will find a picture of one of our standard rug displays on the back cover of our Annual Report. Woolworth's is "on the move" to supply the needs of the home as well as the needs of the people who live in them.

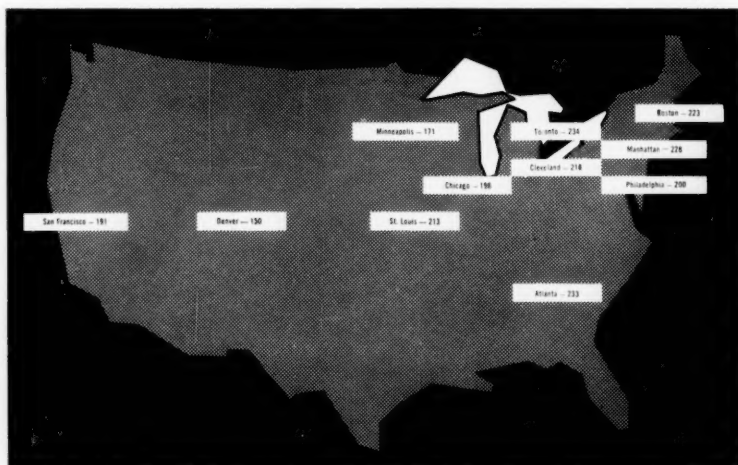
A unique development of the last year is the introduction of a suburban garden center, free-standing

food departments of which we are presently the largest operators in the country. At the year-end we had 1,633 restaurants with approximately 23 miles of lunch counters capable of serving 59,464 customers at one time. Every working day of the year we serve more than half a million people during the noon lunch period. To give you some idea of the quantities of food sold, our customers in 1959 consumed more than 7.5 million turkey dinners, 10 million cuts of apple pie, 450 carloads of potatoes, 450 carloads of flour, 300,000 cases of oranges, 6 million-plus pounds of beef and more than 4 million pounds of pork. They drank in excess of 110 million cups of coffee. We have eleven in-

which Woolworth's was built is our hardware department. To meet the requirements of the growing number of "do-it-yourself" enthusiasts among new young families this big volume department is being rejuvenated with expanded lines and improved display and its merchandising is being coordinated with household appliances and accessories.

In common with industry generally, our operations in the postwar period have been affected by a trend of persistently rising wage costs which we are aggressively working to overcome. We have upgraded the quality and competence of our personnel; we have simultaneously sought out ways of improving their efficiency through visual and written training programs. We have established a Central Accounting Office in Milwaukee, Wisconsin, consolidating all of our accounting and bill-paying operations which were formerly carried on in 10 district offices throughout the United States. We recently appointed a new vice president whose major responsibility is the checking and analyzing of all costs of operation. The use of self-service and "check-out" has proved to be extremely valuable in containing costs and we have extended the technique to an ever-increasing number of our stores. At the close of last year, 55 percent of our stores were on a self-service basis compared with 5 percent as recently as 1953. While we believe we now have a tight rein on major costs, we are not complacent about it and we believe we have not yet exhausted all possible savings available to us.

Our manpower program starts with our founders' concept that all executives in the Woolworth Company come from the ranks. All personnel, from store manager up, are on an incentive compensation basis. Our operations are carried on through eleven district offices each of which operates semi-autonomously under the direction of the executive office. Right now, we have over 2,200 young men in training as future store managers and executives. Each year the percentage of college men in training is increasing. We are confident that we have one of the best buying staffs ever organized, whose job it is to keep our stores supplied with the kind



The district offices of F. W. Woolworth Company in the United States are located in the cities designated on the map, and the figures indicate the number of stores in each district.

and unrelated to any downtown or shopping center store. In addition to the staple items found in garden departments, the garden center offers such things as prefab lanais, reed fencing, barbecues, lawn mowers, garden hoses, sprinklers, garden sprays, ornaments, potting soil and the widest possible selection of outdoor living items. Everything to be planted is sold on a money-back, "guaranteed to grow" basis, and seasonal items are aggressively merchandised in volume. This type of operation is very promising and we hope to open at least 20 Garden Centers in 1960 throughout the United States.

We are continuing to expand our

store full scale cafeterias and four free-standing "Harvest House" cafeterias.

Almost every new store now being opened has a lunch counter or cafeteria and the larger stores also have bakery counters. Our food business has consistently been our largest dollar volume producer and we intend to expand it further. In 1960 we expect to add at least 155 new lunch counter units, two in-store cafeterias and two free-standing "Harvest House" cafeterias. The foods served in all of our stores are prepared from standard recipes, tried and proven in our test laboratory.

One of the staple lines upon

of merchandise our customers want, and to anticipate their future needs.

In recent years, we have added a well organized Sales Department, an Advertising Department and a Display Department. Our Research Department, organized for the purpose of analyzing all phases of our operations, has come forward with new methods of merchandising our vast assortment of goods. It has improved our methods of communication, our merchandise handling at the district office and store level and the efficiency of the lay-away department, and has established new and improved methods of store inspection by managers and superintendents.

In large part, due to the efforts of our research people, we now have completed an automatic merchandising ordering system for staple merchandise for all the stores serviced by our New York and Chicago warehouses. This system will tend to reduce the number of out-of-stock items, increase turnover, bring about controlled inventory and a reduced investment. While this system was initiated only a year and a half ago, we expect that real benefits will be forthcoming in 1960.

Because we now stock and sell a number of big ticket items, we are experimenting in the credit field. Credit is available to customers in forty-two of our stores in the Cleveland area, and we have recently extended the experiment to twenty-three stores in the Detroit area. Results so far are inconclusive but we do not expect credit to become a significant factor in our operations until such time as our average sale has increased well above its present level.

We recognize that our long-term future as a merchandising organization is dependent primarily on our ability to generate an expanding sales volume. Consequently, we have moved rapidly to upgrade our price lines and to introduce new product lines for which we anticipate the greatest consumer demand. And we are supporting these measures with an aggressive advertising program which we think serves a two-fold purpose: (1) it projects the variety store image in such a way that the public will look to us rather than a non-variety competitor

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WOOLWORTH

when contemplating the purchase of variety-type items and (2) it exposes the public to the newer items carried by our stores and thus exploits their sales potential. As late as 1957 our newspaper advertising was practically nil. In 1958 we used in the neighborhood of ten million lines of advertising. In 1959 we doubled our newspaper lineage as compared with 1958 and we are projecting a sizable increase for 1960.

Although we are placing the greater emphasis on newspaper advertising, we are using other media, such as radio and television, magazines and weekly papers to supplement our program at local levels and for spot promotions. Sales results, of course, are the only true test of advertising effectiveness but you might be interested to know that in 1959 we won the annual Achievement Award sponsored by the American Newspaper Publishers Association Bureau of Advertising. This recognition was particularly gratifying to us since we are a comparative newcomer to the field of large-scale advertising and this was the first time in the Award's fourteen-year history that any retail establishment was so honored.

Foreign Operations

Our foreign operations account for 40 percent of our reported net income. F. W. Woolworth and Co., Limited, the largest mercantile organization in the British Empire, operates 1,028 stores in the British Isles and 7 stores in the West Indies and Southern Rhodesia. Through very wide distribution the public owns 47.3 percent of the 135,000,000 shares of the stock outstanding. Our 52.7 percent interest had as of December 31, 1959, a stock market value of \$680,987,000 or \$34,484,000 more than the market value of the whole American Company. In other words, our holdings in the British Company were worth \$70 per share while our own stock sold at \$66½ per share. Woolworth Limited's net profits have increased from £5,000,000 in 1949 to £14,000,000 last year and the prospects favor further marked growth.

Our German operation, which began in 1927, was entirely wiped out during World War II. Starting in 1945, with not a single store intact, it has been completely rebuilt with

only limited financial assistance from the parent company. At the end of last year, it had 91 new stores in operation or 9 more than pre-war. Our 97 percent interest in F. W. Woolworth Co., G.m.b.H., Germany, which we carry on our books at \$1, provided us with \$2,282,784 in dividend income last year. The potentialities for growth in the German phase of the European Common Market are considered substantial and we expect Woolworth Germany to show continued expansion and increased sales and profits in 1960 and subsequent years.

F. W. Woolworth Co., S.A. de C.V., Mexico, which started in 1956 had seven stores in operation at the end of 1959, and expects to open another new store early this year. Our merchandise, of which 97 percent is made in Mexico, is meeting with ready acceptance by the Mexican public and we look with optimism to the Company's future. So far, we have not taken any dividends from this subsidiary.

Capital Program

Last year, we invested \$36,210,408 in real estate, buildings, leased ground, equipment and alterations for domestic operations. Retained earnings were \$14,801,691 and depreciation and amortization amounted to \$23,157,489 or a total of \$37,959,180. Present plans call for the investment of \$35,000,000 to \$38,000,000 this year for the opening of approximately 150 new stores, the moving of 20 to new locations and the improving and refurbishing of 90 stores in the same locations.

In order to serve the increasing needs of the growing population of the United States and Canada and maintain our dominant position in our field, we expect to spend in excess of \$150,000,000 in new and improved stores over the next five years. Our cash-flow projections show that with increased earnings and heavy depreciation and amortization, we should be able to generate the funds required for this substantial investment without any new equity or long-term financing, and still maintain a strong working capital position.

Sales of \$916,836,907 last year set a new record high for volume. Our increase was 6.05 percent. With the strong forward momentum of our

organization, sparked by a Convention held late last fall attended by all members of our executive office, district managers and 153 superintendents, the sales goal for 1960 has been set at one billion dollars. This projected increase which amounts to 9 percent is not going to be easy to achieve, but we face the task with confidence. We are planning for further good sales increases in the years which lie ahead.

Just about a year ago, I stated in a speech that I thought we had reached a turning point in our earnings picture and that improvement was in prospect. Developments since then confirm this belief and the 21 percent improvement in our per share earnings for 1959 — an eleven year high of \$4.03 — is concrete evidence of it. You will, I believe, be interested in the sources of this improvement: 36 cents per share came from increased dividends from our German and English subsidiaries and 33 cents per share came from our United States and Canadian operations.

If we were to include the undistributed equity in our foreign operations, our earnings per share would increase from \$4.03 to \$5.01 compared with \$3.34 and \$4.39 for 1958.

Both our domestic and foreign operations should do better in 1960. As noted earlier, we are shooting for a 9 percent increase in domestic sales and, if we can control our expenses as planned, domestic earnings should improve accordingly. It is expected that our dividends for 1960 from the English and German subsidiaries will be about the same as those received in 1959, with the possibility of a slight increase.

The Outlook

The Woolworth management looks forward to the years which lie ahead with optimism and confidence. The projected increase in population promises a growing market for our merchandise. By broadening our lines to serve the needs of the entire family as well as those of the house and garden, we are improving our position to capture a greater share of the retail business. We have the personnel, the competence, and the financial strength to make Woolworth's a bigger and more prosperous company. Woolworth's is really "on the move" at home and abroad.

On the Kanawha River, West Virginia . . .

C&O OFFERS AN EXTRA DIMENSION IN SITE SELECTION

It is not enough to know the physical community in terms of transportation, fuel, power, water, topography, resources and labor. Equally important are the less apparent facts of community conditions, the profile of the people, zoning regulations, property ownership, tax impact.

The *extra dimension* of service offered by C&O's Industrial Development Department comes from a knowledge of every plant site in the Chesapeake and Ohio Railway service area. Probing in depth with you, this staff of locations specialists, trained in the skills of engineering, industrial analysis, the earth sciences, economics and mapmaking, presents all the facts . . . simply, unembellished.

There are many attractive locations along Chessie's 5100-mile system, serving the heart of industrial America. A few are listed on the opposite side of this page.

*** OPPORTUNITY IN WEST VIRGINIA'S "CHEMICAL VALLEY"**

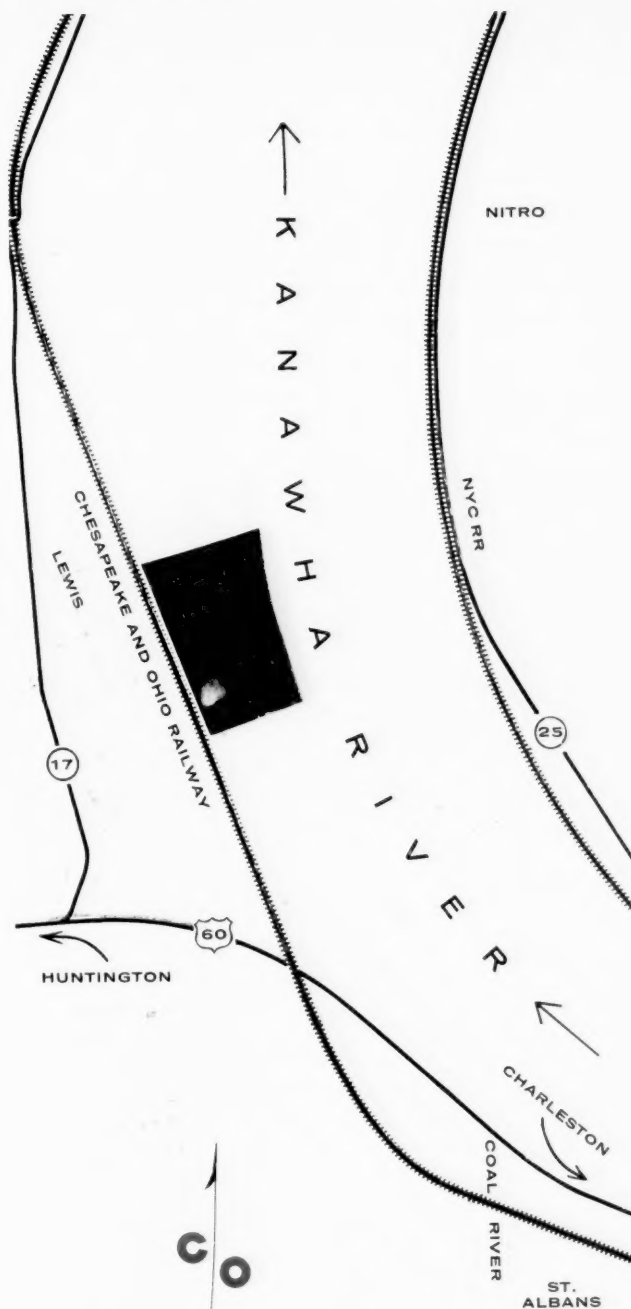
The 43-acre Lewis site, clear and level, is 13 miles from Charleston, West Virginia's capital. Other sites adjacent or nearby.

Transportation: On the C&O mainline and the canalized Kanawha River. Close to U. S. Highway 60.

Economical, dependable, high-grade fuel from the Middle Appalachian coal fields. Abundant electricity and natural gas. All the water you can use.

Utilities: Appalachian Power Company (AEP system); United Fuel Gas Co. (Columbia system); West Virginia Water Service Co.

Nearby St. Albans is an appealing residential community. More than 1,000 workers available at current wage levels.



Chesapeake and Ohio Railway

Industrial Development Department

Huntington 1, West Virginia

Outstandability in Transportation

Partial list of available sites for industry

Contact the C&O Industrial Development Department for full information on these and many more choice locations

1—Lansing, Michigan—De Witt Rd. site: a fine 12-acre parcel in northwest Lansing near Capital City Airport, on C&O's Chicago-Grand Rapids-Detroit mainline. Fronts on State Route 174; 2,000 feet from U. S. Highway 16. All utilities at hand; firehouse close by. Electricity: municipal. Gas: Consumers Power Co. Excellent worker potential from area labor force of 112,000.

2—Marion, Indiana—C&O invites location in level 369-acre property, zoned for heavy industry, with all utilities available. On mainline, Chicago to Cincinnati; reciprocal switching with three other railroads. Close to State Route 18. Dana Corp. and General Motors plants nearby. Utilities: Indiana & Michigan Electric Company (AEP system); Central Indiana Gas Co. (Consolidated affiliate).

3—Ludington, Michigan—This thriving port of 11,000 is the Michigan terminal for C&O's translake trainferry service to and from Wisconsin port connections with Western carriers. Back from port railway has 87-acre site, nearly level, except small dunes. Ideal for Northwest-Northeast business. Utilities: Consumers Power Co.; Michigan Consolidated Gas Co. Close to U. S. Highways 31 and 10.

4—Michigan City, Indiana—Two nearly level parcels of 43 acres and 22 acres on C&O's Chicago-Detroit-Buffalo mainline. Fifty-eight miles from Chicago loop. Both sites front on State Route 212, a 4-lane road linking U. S. Highways 12 and 20. Now in city: gas, water, sewer, when needed. Power and gas: Northern Indiana Public Service Co. Also adjoining properties.

5—Richmond, Virginia—Choice level sites in the 200-acre Airport Industrial District, five miles from downtown Richmond. Adjacent to Byrd Field, city's airport. All utilities. Lead track to C&O's fast mainline, Newport News to Chicago. District is already distribution center for Ford, GM, Allis-Chalmers. Electricity: Virginia Electric & Power Co.

6—Southern Ohio—C&O offers site in 215-acre upland tract at Gregg in hanging valley of ancient Teays. Water from Scioto River aquifers. Utilities: Columbus and Southern Ohio Electric Co.; Pike Natural Gas Co. Piketon village will extend services. Twenty-eight miles north of industrial Portsmouth; near Atomic Energy plant. In area of labor surplus.

7—Logan, Ohio—A forward-looking city of 6,000 in the Hocking Valley, forty-nine miles southeast of Columbus. On C&O line and U. S. Highway 33. Affords several choice sites. Abundant fuel sources; water from Hocking River aquifers. Utilities: Ohio Power Co. (AEP system); The Ohio Fuel Gas Company (Columbia system). Large reservoir of skilled, semiskilled and unskilled labor.

8—Shenandoah Valley—Several fine industrial sites ranging from 5 to 150 acres, at Fishersville, midway between Staunton and Waynesboro (eleven miles apart), on C&O mainline and U. S. Highway 250. Attractive area for climate, education, recreation. Utilities: Virginia Electric and Power Co.; Virginia Gas Distribution Corp. (Columbia system); Augusta County (water). Ample labor.

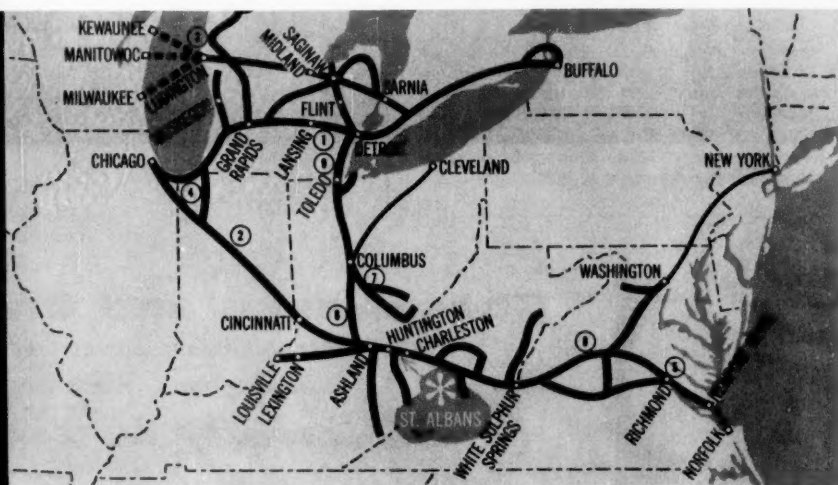
9—Erie, Michigan—Pick your own site in 913-acre property, all level and well drained, adjoining C&O's Ottawa Yard. Ten miles from downtown Toledo, forty-seven miles from Detroit. Lies between U. S. Highways 25 and 24. Electricity from Consumers Power Co.; in sight of new generating plant. Water from Lake Erie. Gas not now available. Access to exceptional labor sources.

Complete industrial surveys of these and other sites along The Chessie Route are available to interested companies. Inquiries are handled in complete confidence and without obligation. Address: Wayne C. Fletcher, Director of Industrial Development, Chesapeake and Ohio Railway, Huntington, West Virginia. Telephone: JACkson 3-8573.

There's
Opportunity for
Industry all
along The
Chessie Route



*Outstandability
in Transportation*



I.D.'s Annual Canadian Progress report this year indicates that the opportunities for further development in Canada remain literally wide open, and the faith that United States industrialists have in that growth promise is attested to by the fact that in 1959 direct investment in new Canadian manufacturing plants was made by 106 U. S. firms.

CANADA

1960

AN ANNUAL PROGRESS REPORT BY

THE INTERNATIONAL GUIDE TO INDUSTRIAL PLANNING AND EXPANSION





sales are

in Canada

Today hundreds of United States companies sell to a market of nearly 18 million Canadians (22 million projected by 1969!). They find it good business. And you will too.

To sell this diversified market you need information on distribution, financing, labour and other factors. For the latest dependable facts on any aspect of commerce, industry or agriculture in any part of Canada write to or contact any one of our offices, and outline your specific problem or project.

For information about company formation and taxation in Canada send your letterhead request for our 75-page booklet "Doing Business in Canada".

Over 850 branches cover Canada

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New York, N.Y., 20 Exchange Place
RESIDENT REPRESENTATIVES:
Chicago, Illinois, 2700 Field Building
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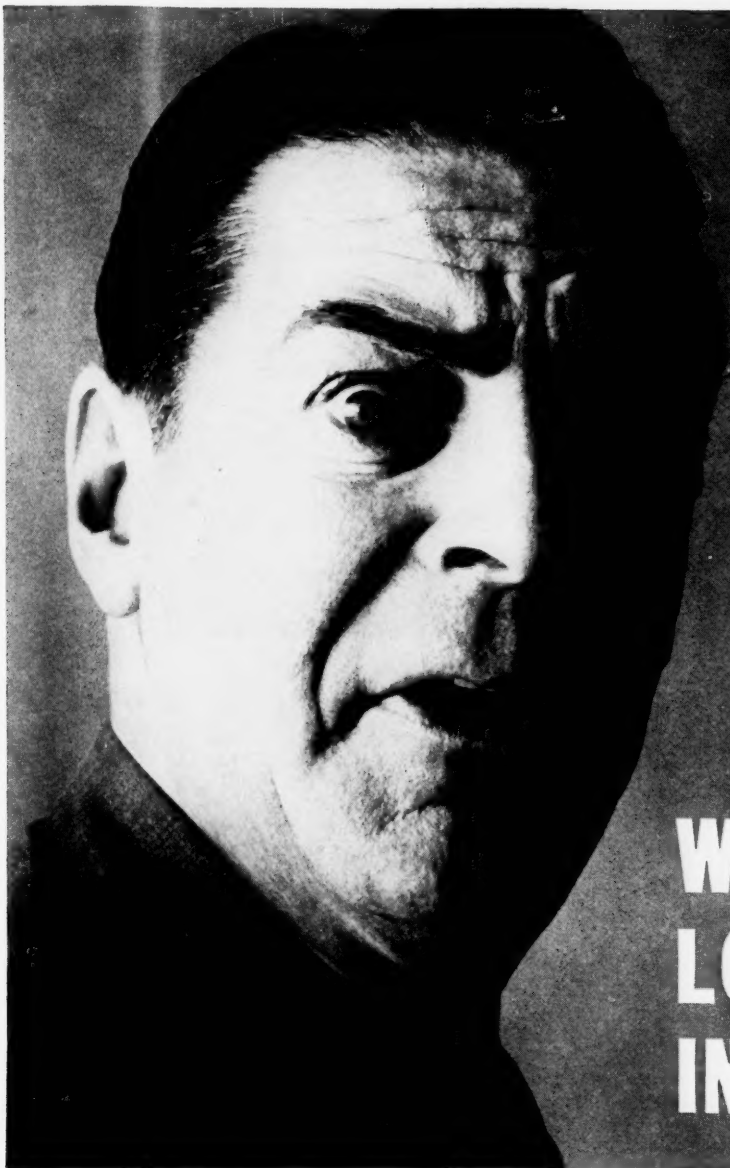
U.S. BRANCHES

San Francisco, Calif., 344 Pine Street
Los Angeles, Calif., 649 South Spring Street
Seattle, Washington, 801 Second Avenue
Portland, Oregon, 303 S.W. Sixth Ave.

B-320

CANADIAN BANK OF COMMERCE

Head Office—Toronto, Canada



WHAT? LOCATE IN CANADA?

YES, WHY NOT? Canada's extensive and varied resources, rapidly increasing population and generally lower costs may well offer you just the opportunity for profitable expansion which you have been looking for. Let the Canadian National Railways, largest railway system in North America and the only railway serving all ten provinces of Canada, assist you in assembling the facts required in determining your optimum plant location in Canada (or in New England served by the Central Vermont Railway, or the Mid-West States served by lines of the Grand Trunk Western Railroad).

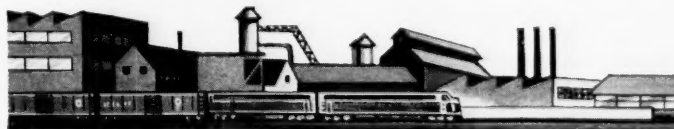
Far more quickly than you could compile all the data, and without cost to you or obligation, the Canadian National Railways' Research and Development Department can assist you in providing information dealing with industrial factors you will wish covered in your survey and analysis. Write or phone:

**R. B. Thomas, CNR Special Representative, 1776 Woolworth Bldg.,
233 Broadway, New York 7, N.Y. WOrth 4-0900.**

**D. F. Purves, CNR Chief of Development, Room 710, 407 McGill St.,
Montreal 1, Que. UN. 1-7311.**



YES! AND WHAT A MARKET!



CANADIAN NATIONAL RAILWAYS

An alert, adaptable citizenry, backed up by such recent developments as marked technological advances and great strides in communication and transportation, plus mineral reserves yet beyond measure and an abundance of energy resources, make Canada today a top candidate for consideration in your expansion planning.

A FRONTIER OF

In today's rapidly changing economic scene, on a worldwide basis, industrialists in the United States are eyeing foreign markets and considering plant locations outside the country perhaps more than ever before.

And, no one other nation has attracted or is continuing to attract as much expansion planning interest from the U.S. as has Canada. The reasons for this are legion. For, as I.D. pointed out in its 1959 Annual Canadian Progress report, our neighbor to the north remains as one of the outstanding places in the world where the development potential has scarcely been touched.

Concerning past growth and the future possibilities, the Dominion Bureau of Statistics observes in its

official handbook: "Canada's remarkable wave of industrial development of the past decade or so may be attributed to a combination of favorable circumstances, some internal and some external, and to the considerable skill and readiness of its citizens in adapting themselves to the challenging opportunities confronting them."

Of particular interest to you as a prospective plant builder is this further comment of the Bureau: "Technological advances, new techniques of geological surveying and of power generation and transmission have accelerated the rate and range of discovery of the underground wealth of this country and greatly facilitated its profitable ex-

ploitation. New fuels in abundance, new means of transport and communications, new structural materials and new industrial processes have drastically modified the whole framework of potential economic development."

The fact also is stressed that perhaps the most significant contribution to Canada's postwar growth and potential as an industrial power — it is now sixth industrially and fourth in international trade among the nations of the world — is the abundance and variety of its energy resources.

The coal reserves, for example, are estimated at 98 billion tons, while the abundant and widely distributed water power resources are



A striking scene along this new section of the Trans-Canada Highway is towering Mount Eisenhower in Banff National Park, Alberta.

GROWTH POTENTIAL

recorded as sufficient to permit a hydro-electric turbine installation of 87 million horsepower and have an installed capacity of more than 22,379 million horsepower. Recoverable reserves of petroleum are estimated at 3.5 billion barrels and those of natural gas at 21 trillion cubic feet.

Among other mineral resources to be found in commercial quantities in Canada are copper, nickel, gold, zinc, iron ore, lead, uranium, asbestos, gypsum, and silver.

General Economic Growth

The just-released 1959 Annual Report of Canada's Department of Trade and Commerce, Ottawa, shows that while economic condi-

tions in the Dominion moved in line with the general expansion in other major trading nations, in the early stage of the current upswing new forward impetus in Canada came primarily from internally-generated demands reinforced by renewed inventory growth following the inventory liquidation of the preceding recessionary period.

By the second quarter of 1959, the report said, the Canadian export total began to move above the \$4.9 billion level about which it had fluctuated for the preceding 30-month period. By the latter part of 1959, the upward trend of exports had become a major expansionary force in the economy. Exports reached a high of \$5,140.5 million, a new record.

Gross National Product last year increased by 6 to 7 per cent from the level of the preceding year. Since prices were up, on the average, about 2 per cent, total national output — in physical volume terms — rose by about 4 per cent.

The strongest advance occurred in the industrial sector, in which output, after moving downward in 1958, rose by 8 per cent in 1959. Agricultural production was up moderately from the 1958 level.

In the work picture, non-farm employment rose by 3.5 per cent between 1958 and 1959. As a result of mechanization and greater productive efficiency, agricultural employment continued to decline but at a slower rate than in preceding years,

CANADA

and total employment was up by nearly 3 per cent.

New job opportunities kept ahead of the expanding labor force, and the number of jobless persons declined. Considered as a proportion of the labor force, unemployment fell from 6.6 per cent in 1958 to 5.6 per cent in 1959.

Income at New High

Evidence of Canada's ever-increasing importance as a market may be seen in the fact that the improved tempo of economic activity has been reflected in higher returns to nearly all major groups. Corporate profits recovered sharply in 1959, as compared to the previous year, and by the latter part of the year had moved to a new high.

Increased rates of pay, together with more and steadier employment, raised labor income by 8 per cent from the 1958 level. All major categories of investment income were higher, and government payments to individuals advanced moderately following on the substantial rise of the preceding year.

Despite lower prices for some commodities and below-average harvests, farm income was down only moderately. Personal income in total, after deducting direct tax payments, increased by 6 per cent between 1958 and 1959.

The report notes further that this strong income trend provided the basis for a quite substantial rise in consumer spending. Of the major categories, outlays on durables, particularly automobiles and household appliances, showed the strongest advance. However, spending on soft goods and for services also increased significantly. Consumer expenditures in total rose by 6 per cent between 1958 and 1959.

With consumer prices having risen by little more than one per cent, per capita spending, in real terms, increased by 2 or 3 per cent, which was a better than average gain. It is noteworthy that even with this strong advance in expenditure, personal savings — as a proportion of total income — reached the highest level of the postwar period.

Total private and public investment was up slightly from 1958. Public investment and other institutional building was up quite sharply. Although capital expenditure by all types of business enterprise was down moderately from the previous year, the trend of business capital spending turned upward early last year and became a significant stimulative force for the rest of the year. There was a marked buildup of capacity in a number of sectors, including power, petroleum refining, natural gas distribution, chemicals, non-metallic minerals, primary iron and steel, and food and tobacco processing.

Total Public and Private Investment in Canada

Year	Millions
1954	\$5,721
1955	6,244
1956	8,034
1957	8,717
1958	8,364
1959	8,411

Population of Canada, by Provinces, 1954-59
Estimated as of June 1 for intercensal years

	1954	1955	1956	1957	1958	1959
	thousands					
Newfoundland	395	406	415	426	438	449
Prince Edward Island	101	100	99	99	100	102
Nova Scotia	673	683	695	702	710	716
New Brunswick	540	547	555	565	577	591
Quebec	4,388	4,517	4,628	4,758	4,884	4,999
Ontario	5,115	5,266	5,405	5,622	5,813	5,952
Manitoba	823	839	850	860	870	885
Saskatchewan	873	878	881	879	888	902
Alberta	1,057	1,091	1,123	1,160	1,210	1,243
British Columbia	1,295	1,342	1,399	1,487	1,544	1,570
Yukon	10	11	12	12	13	13
Northwest Territories	17	18	19	19	20	21
Canada	15,297	15,698	16,081	16,589	17,048	17,442

The Civilian Labour Force, 1954-59

	1954	1955	1956	1957	1958	1959
	thousands					
Civilian non-institutional population, 14 years of age and over	10,391	10,597	10,805	11,108	11,357	11,562
Civilian labour force:						
Persons with jobs:						
Non-agricultural	4,380	4,559	4,826	5,002	5,010	5,186
Agricultural	878	819	776	744	712	692
Total persons with jobs	5,258	5,378	5,602	5,746	5,722	5,878
Persons without jobs and seeking work	235	232	180	257	405	350
Total civilian labour force	5,493	5,610	5,782	6,003	6,127	6,228

New housing starts reached 141,000 units in 1959, as compared with 165,000 units in the preceding year, while completions reached 146,000 units, almost up to the 1953 level.

Noting that the general strengthening in market conditions in 1959 was felt in virtually all major segments of Canadian industry, the report said that among those industries experiencing the most vigorous advance was primary iron and steel which was subject to the dual stimuli of rising consumption and limited supplies resulting from the shutdown of U.S. mills.

In response to the higher consumer spending, activity in consumer inventories rose, and business volume increased in several of the equipment industries, including farm implements, commercial vehicles, office equipment, and various types of industrial machinery. After a slow start, basic material industries such as pulp and paper and non-ferrous metals achieved sizeable

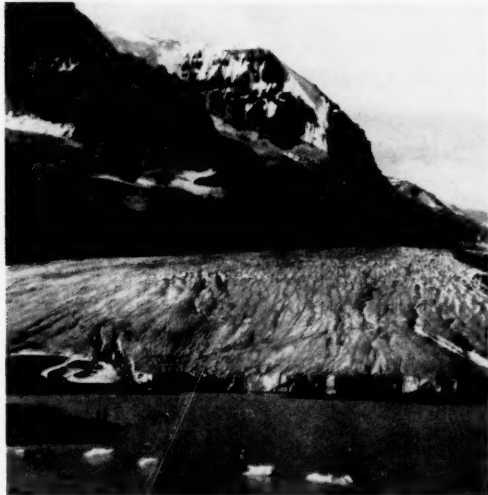
(Continued on page 26)

A VITAL ECONOMY:

Vancouver, the biggest city in British Columbia, is the center of a teeming metropolitan area which has a population estimated at 868,100. The big harbor here has direct access to the Pacific Ocean through the Straits of Georgia and Juan de Fuca, and the entrance channel to the harbor is open the year around.



The spectacular Athabasca Glacier tongue is part of the Columbia Icefields in Jasper National Park, Alberta. Mount Andromeda is the peak at top left. Breathtaking scenery such as this is characteristic of the mountain areas of Canada.



This is a scene on Highway 1 near Hunter River between Charlottetown and Summerside on Prince Edward Island. Canada's smallest province, P.E.I. is a popular tourist area and an important producer of agricultural crops and seafoods.



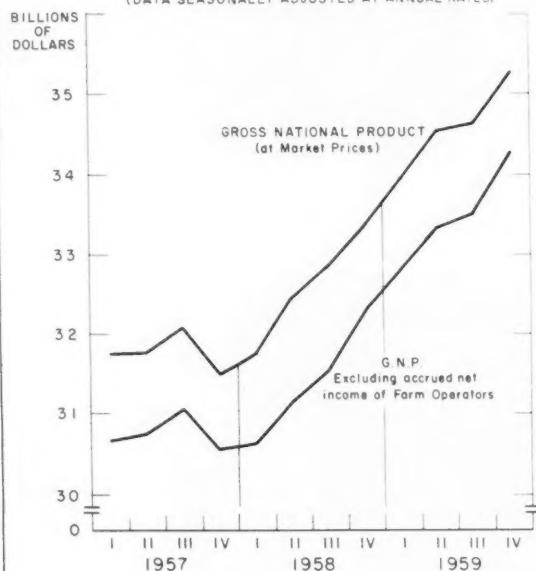
At the recent opening in Regina of a new steel mill, an interior view of which is shown here, Saskatchewan's Provincial Treasurer C. M. Fines described it as "the Pittsburgh of the Prairies." He stressed, too, that the economy of the area was changing from one of a predominantly distributing nature to that of a manufacturing center.



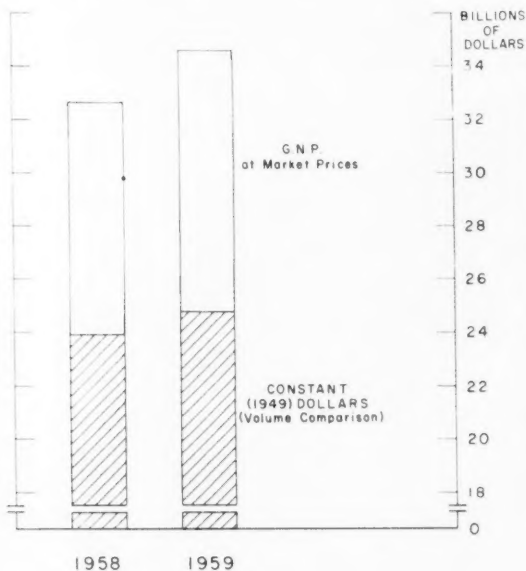
These Newfoundland fishermen are hauling a codtrap. After the mesh has been drawn into the boats, "drying up" the fish, dipnets are used to brail the fish into the trapboat. During the past 11 years the province has made great strides in modernizing its fisheries.

GROSS NATIONAL PRODUCT SHOWED A
MARKED RISE IN 1959
FOLLOWING THE UPSWING
WHICH BEGAN IN 1958

(DATA SEASONALLY ADJUSTED AT ANNUAL RATES)



THE VALUE INCREASE FOR THE YEAR
AS A WHOLE WAS ABOUT 6 PER CENT
OVER 1958, WITH THE VOLUME OF PRODUCTION
UP BY ABOUT 4 PER CENT



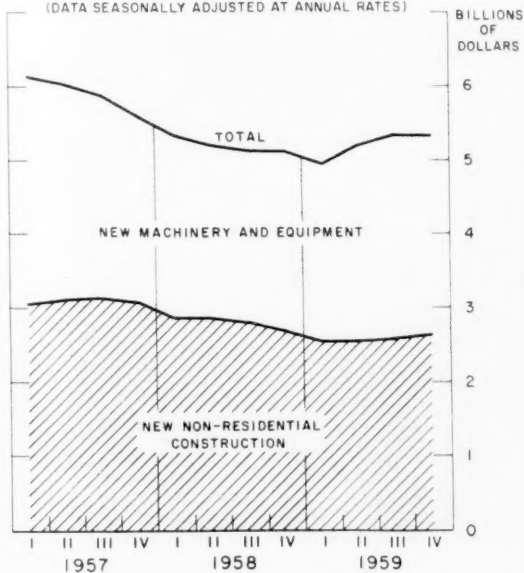
THE SWING IN BUSINESS INVENTORIES FROM
LIQUIDATION IN 1958 TO ACCUMULATION
IN 1959 CONTRIBUTED SUBSTANTIALLY TO THE
INCREASE IN GROSS NATIONAL PRODUCT

(DATA SEASONALLY ADJUSTED AT ANNUAL RATES)



THE TWO-YEAR DOWNTREND OF BUSINESS
OUTLAYS FOR PLANT AND EQUIPMENT
WAS REVERSED IN THE EARLY
PART OF 1959

(DATA SEASONALLY ADJUSTED AT ANNUAL RATES)

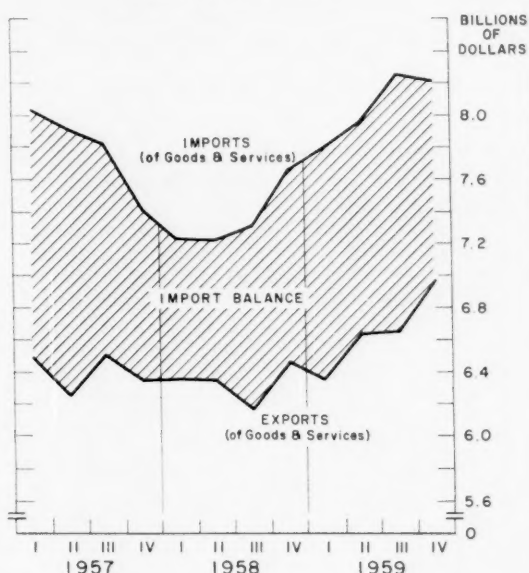


Charts Courtesy Dominion Bureau of Statistics, Ottawa

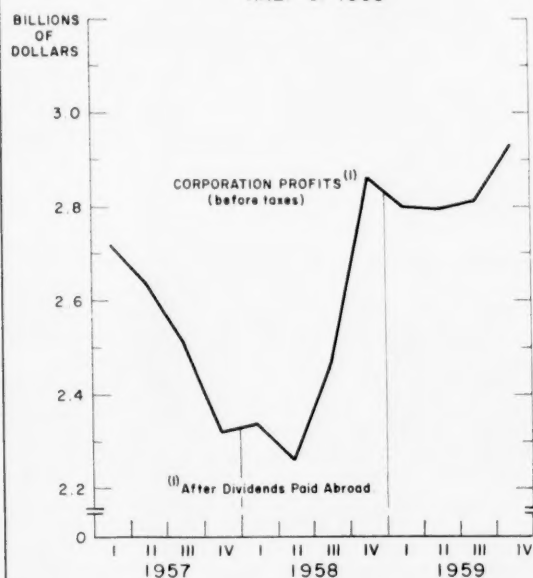
CONSUMER EXPENDITURE CONTINUED TO PROVIDE STRENGTH ON THE DEMAND SIDE. HOWEVER, THE UPWARD TRENDS IN HOUSING AND GOVERNMENT EXPENDITURE WERE INTERRUPTED DURING THE PERIOD



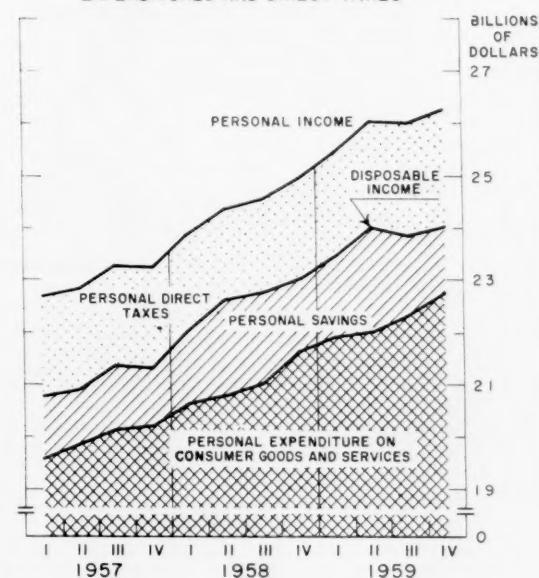
EXPORTS ROSE SUBSTANTIALLY, BUT THE RISE WAS ACCOMPANIED BY A MUCH SHARPER INCREASE IN IMPORTS, WITH A CONSEQUENT WIDENING OF THE DEFICIT



CORPORATION PROFITS LEVELLED OFF IN 1959, FOLLOWING THE SHARP UPSWING IN THE LAST HALF OF 1958



PERSONAL INCOME SHOWED A YEAR-TO-YEAR GAIN OF 6 PER CENT, WHICH WAS LARGELY ABSORBED BY THE RISE IN CONSUMER EXPENDITURES AND DIRECT TAXES



(ALL DATA AT SEASONALLY ADJUSTED ANNUAL RATES)

Charts Courtesy Dominion Bureau of Statistics, Ottawa

(Continued from page 22)

gains over the levels of the preceding year.

Canadian producers, on the average, retained an almost undiminished share of the expanding domestic market, manufacturing output having increased by 7 per cent between 1958 and 1959, compared with a 9 per cent increase in total imports.

106 New Plants from U. S.

During 1959 a total of 130 foreign firms made direct investments in Canadian manufacturing. The great interest that United States industrialists have in Canada as a good location is impressively attested to by the fact that 106 of the 130 firms were from the U.S. Fifteen were from the United Kingdom, while the remainder were from various other countries.

The new plants established by foreign investors in Canada represent a great diversity of products which, in turn, is a clear indication of the rapid broadening of the Canadian market.

Here are some examples of the new enterprises:

Reliance Electric and Engineering Company of Cleveland, Ohio, purchased a modern plant at Stratford, Ontario, to produce electronic controls; Crucible Steel Company, Pittsburgh, has acquired steel-making facilities at Sorel Quebec; Fingerhut International Limited, subsidiary of Fingerhut Products, Minneapolis, has set up a plant at Cornwall, Ontario, to manufacture vinyl auto seat covers; Robbins Floor Products of Canada Limited, a subsidiary of Robbins Floor Products, Inc., Tusculumbia, Alabama, has established a plant at Granby, Quebec, to produce floor tile; Owens-Illinois Canada Limited, subsidiary of Owens-Illinois, Toledo, has set up a plant at Toronto to make plastic containers for liquid detergents; Automatic Timing & Controls, Inc., King of Prussia, Pennsylvania, has established a manufacturing subsidiary in Montreal to produce industrial timers, and British Titan Products (Canada) Limited, a subsidiary of British Titan Products Company Limited, Coppergate, York, has established a plant at Tracy, Quebec, for the production of titanium pigments.

Many of the new plants built by foreign investment were assisted in getting Canadian locations by the Industrial Development branch of the Department of Trade and Commerce which has headquarters at Ottawa. Gordon Churchill is minister of the Department, and James A. Roberts is deputy minister.

The function of the Industrial Development Branch is to coordinate the federal government activities in the industrial development field. Assistance is provided to foreign companies interested in establishing plants in Canada and to Canadian firms considering expansion or seeking new products to round out their production.

In carrying out these assignments, the Branch works closely with other federal agencies and with provincial, regional and municipal bodies, as well as with private development agencies such as railways, banks, power companies, boards of trade, chambers of commerce, and the Canadian Manufacturers Association.

PLANT LOCATION ASSISTANCE

In addition to the Industrial Development Branch of the Canadian Department of Trade and Commerce at Ottawa, and the industrial development departments of each of the provinces which offer you expert aid in site selection, there are more than 1,100 different development groups in Canada offering professional help to the prospective plant builder. These groups have been identified and catalogued by the Research Department of Conway Publications and will be published in the Site Selection Handbook Edition in October.

Direct inquiries received in 1959 included 575 from 33 foreign countries and 550 from Canadian sources. Approximately 900 foreign and Canadian businessmen were interviewed in Ottawa. In addition, officers of the Branch consulted with many others during business tours in Canada and abroad.

Specific aids offered to you by the Branch include a series of highly informative and useful booklets which have the general title of "Doing Business in Canada."

Subtitles in the series are: *Labour Legislation in Canada; The Canadian Environment; Canadian Customs Duties; Forms of Business Organization in Canada; Tariff Preferences for Canadian Goods Abroad; Patents Copyrights and Trade Marks in Canada; Professional Standards in Canada; Construction and Equipment Standards in Canada; Taxation in Canada — Sales, Excise, Commodity; Taxation in Canada — Income, Business, Property.*

Components for Growth

Factors which have enabled Canada to enjoy this remarkable growth include such things as its rapidly improving transportation system — land, water and air — its great resources of workers, and its cultural background enhanced by a school system that is regarded as second to none.

Almost all the railway facilities in Canada are operated by two big transcontinental systems, the Canadian National Railway System — a government-owned body — and the Canadian Pacific Railway Company, a joint stock corporation.

Both these systems operate — in addition to their wide-flung railway and express activities and their extensive maintenance services — fleets of inland and coastal vessels and ferries, ocean-going steamships, nation-wide telegraph services providing communications between all principal points of Canada with connections to all parts of the world, highway transport services, year around and resort hotels, and extensive passenger and freight air services over domestic and international routes.

Canada's road-building program continues to be on the increase. Since the end of World War II the national, provincial and local governments have spent well in excess of \$5 billion for repairing, rebuilding and extending highways, roads and streets. Work on the Trans-Canada highway was scheduled for completion during 1960.

The rank of Canada as fourth trading nation in the world has been arrived at through commerce that moves not only in coastwise shipping, and to and from coastal harbors, but also along the St. Law-

(Continued on page 30)

Whitney-Hanson, Ltd.

DESIGNS
CONSTRUCTS
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●
INDUSTRIAL,
COMMERCIAL AND
INSTITUTIONAL
PROJECTS
THROUGHOUT
Canada

Whitney-Hanson, Ltd. is the Canadian affiliate of an international organization offering a complete range of services for Industrial, Commercial and Institutional relocation and expansion in North, South and Central America through these associated companies.

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Complete service for Industrial, Commercial and Institutional relocation or expansion. Surveys, reports, designs, construction and financing.

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Real Estate Brokerage, primarily specializing in Industrial, Commercial and Institutional Real Estate. Negotiations for the purchase, sale, lease and financing. We act for purchasers or sellers or lessees internationally.

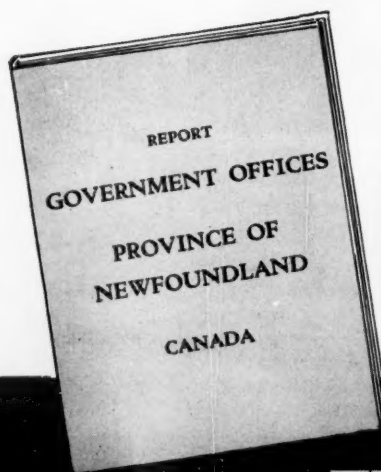


Office Building of National Publishing Co., affiliate of Curtis Publishing Co. and Time and Life Magazines. This building contains 15,000 sq. ft.

Shown on the following 2 pages is the 385,000 sq. ft. office building of the government of Newfoundland designed, built and financed by hanson & hanson inc. Contrasted with the 15,000 sq. ft. building illustrated above, it demonstrates the wide range of projects planned and built by our organization.



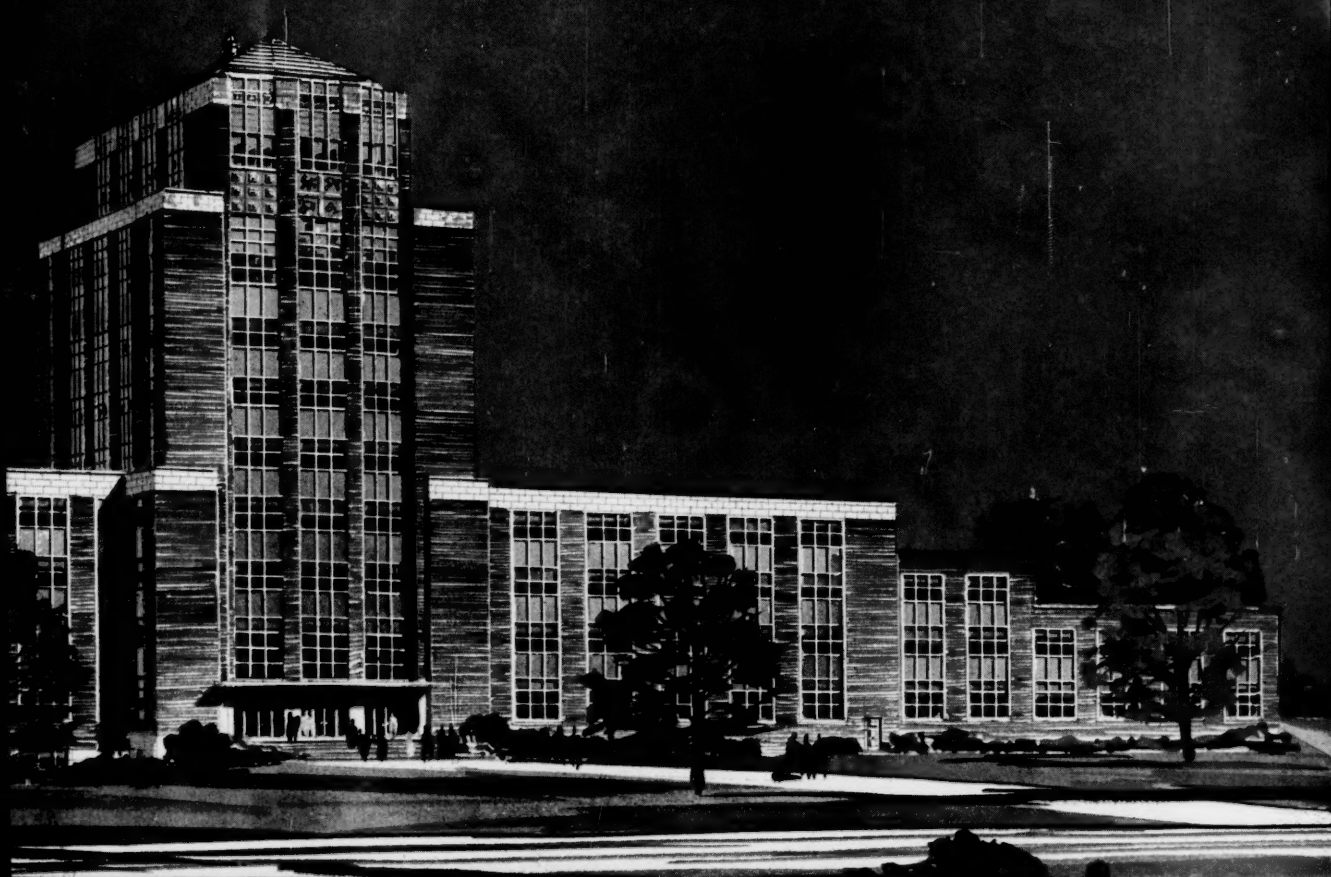
New Confederation Building To Be Completed



This comprehensive report described in detail how 16 Departments, 103 Divisions, 10 Associated Boards, formerly located in 30 different places, could be centralized in one Capitol Building.

The Government of the Province of Newfoundland engaged Whitney-Hanson, Ltd., our Canadian affiliate, to make a thorough analysis of the Government requirements for a new Central Office Building which was urgently needed. Whitney-Hanson, Ltd. prepared a comprehensive Report in book form (shown on this page) which included the exact requirements for each department of Government, costs of construction and methods of financing.

DESIGN • CONSTRUCTION • FINANCE



Province of Newfoundland and Ready for 1960 Occupancy

hanson & hanson inc. then proceeded to design, build and finance this project in accordance with the Report which had been submitted to and approved by the Province of Newfoundland.

Our permanent staff is supplemented as projects may require by local architects, engineers and consultants in technical specialties including financial advisors, insurance underwriting specialists and others.

Projects originated by Bankers, Realtors, Industrialists, Architects, Chambers of Commerce, Government Boards, etc. are referred to us. Our services are available for City, County, State, Province and private industrial and commercial enterprises throughout the United States, Canada and other foreign countries.

Brochure on Request



CANADA

(Continued from page 26)

rence Seaway, on the Great Lakes, and on the numerous smaller lakes and rivers farther inland, as well as on canals.

Well supplied with good harbors, Canada has eight harbors that are administered by the National Harbours Board. Seven other harbors are administered by commissions that include municipal as well as Federal appointees and, in addition, there are about 300 public harbors, all of which are under the supervision of the Department of Transport.

A large construction program is under way both by the National Harbours Board and by other administering agencies to keep Canadian harbor facilities in line with requirements.

In the air the nucleus of Canada's freight and passenger air service is provided by Trans-Canada Air Lines and Canadian Pacific Air Lines. Further, there are a number of smaller air carriers which supplement the operations of TCA and CPA. Non-scheduled services also are operated by most of the independent lines.

A chain of airports, equipped with modern air navigation facilities, extends from coast to coast, linking at Edmonton with the Yukon and Northwest Territories.

Thus, even though Canada is a nation of vast distances, the various forms of transportation available to you, and which are well dispersed across the continent, are such that you can choose a location with adequate transportation facilities for your particular needs in any one of the provinces.

Insofar as the work force is concerned, figures compiled by the Dominion Bureau of Statistics show that there are 5.186 million Canadians with jobs in non-agricultural pursuits, while agriculture provides employment for 692,000 making a total of 5.878 million at work. Add the estimated 350,000 persons who are without jobs and seeking work to the on-the-job total and you get an aggregate labor force of 6.228 million.

The children of these Canadians have access to a system of public and private schools which has enabled the country to have a literacy rate of better than 97 per cent.

Altogether, Canada has more than 40,000 schools to take care of the more than one fifth of the population that is of elementary or high school age.

For higher education there are some 35 degree-granting institutions, other than purely theological institutions, and 304 affiliated or independent colleges.

Vocational education also is an important factor throughout Canada. The post high school technical institutes and trade schools available are generally operated by the provincial government concerned, while those at the high school level are operated by the municipality in which they are located.

It is estimated, also, that about a million Canadian adults participate during the school year in one or more of a great variety of activities ranging from fundamental education to studies at university level, and courses directed toward such ends as English or French for new Canadians preparation to hold better jobs, do-it-yourself skills, and an increase of knowledge whether for university credit or not.

Add to all this such things as the scenic beauties of Canada, from long stretches of beach to breathtaking mountains, the great variations and contrasts of climate and terrain, plus a broad and seasoned development in the field of arts and general culture, and you have in Canada a remarkably satisfying place in which to live.

If you plan to locate in Canada you will find, too, that even though it is a foreign country, no passports are required of U.S. citizens, and red tape is reduced to a minimum.

You will be entertained by the fact that in eastern Canada there are radio and television stations broadcasting in French, and newspapers printed in French, but virtually all the people even in such predominantly French-speaking areas as Quebec both speak and understand English.

In addition to assembling a vast amount of statistical and general information on the Canadian economy as a whole for use in this annual report, I.D. requested officials in each of the provinces to give their opinions on growth and development in their particular areas.

Those who responded to the request gave thoughtful and informative replies as follows:

Minerals Tops In Alberta

A. Russell Patrick, provincial secretary, Minister of Industry and Development, Edmonton, Alberta:

"Industrial development in Alberta since the end of the war has been predicated on the development of our mineral resources — particularly oil and natural gas — and on the concurrent population growth. Crude oil production rose from just over 20,000 barrels per day to a peak of around 400,000 — and a potential of over 800,000 barrels. Natural gas production rose from 50,579 MMCF in 1946 to over 352,734 MMCF in 1959. Along with the oil resources development activity has come a rapid population expansion — from 800,000 in 1946 to 1,300,000 in 1960.

"The accompanying development of manufacturing facilities has followed logically. Capital investment, repair and replacement expenditures on manufacturing plants in the thirteen years 1948 to 1960 is expected to total over \$958 million. The total annual value of manufacturer's shipments has arisen from \$366 million to over \$900 million. Over the same period, employment in manufacturing has risen from an annual average of nearly 26,000 to well over 40,000.

"The pattern of manufacturing has altered radically. In 1948 nearly two thirds of Alberta manufacturing was in the foods and beverages industries — based on an agricultural economy. By 1959-60 the proportion had fallen to only one third of the total; and the share of petroleum, chemical and allied products had risen to nearly 25 per cent of all production. Over the same period our iron and steel products plants had increased their share to nearly 10 per cent of the total — again spurred on primarily to service the needs of oil resource development programmes, and the accompanying boom in the construction industry.

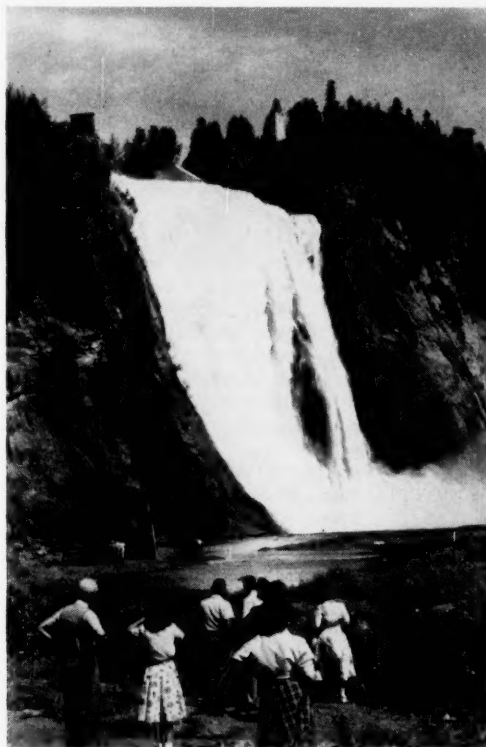
"Against this background of industrial developments in the 1950's it is timely to appraise prospects for industrial developments in the 1960's. Over the next decade the population of the prairie provinces

(Continued on page 32)

BEAUTY AND INDUSTRY:



While New Brunswick has its special recreational attractions, like this scene at Shediac Beach, Deputy Minister John A. Paterson of the Province's Department of Industry and Development says New Brunswick has in recent years "rapidly become the production center for a growing eastern Canadian market. This . . . is not a passing phase but rather appears to be the beginning of even further economic growth . . .".



Beautiful Montmorency Falls, near the historic City of Quebec, are a strong lure for sightseeing visitors. Against this backdrop of scenic attractions the economy of the Province of Quebec has enjoyed during the past decade an increase of \$2.5 billion in its manufacturing production.



The giant "Queen Mary" docks at the Quay Wall at Ocean Terminals, Port of Halifax, in Nova Scotia. The Halifax Harbor is ice-free the year around and has a 45-foot minimum depth at all ocean piers. It is the nearest port on the North American continent to Europe and other major world markets.



Slaughtering and meat packing constitute the largest single industry in the Province of Manitoba. This sprawling packing plant is located in the City of Winnipeg. During 1959 the overall new capital investment by industry in Manitoba totaled \$70.1 million, a new high.



Bucyrus Erie opened this new plant at Guelph, Ontario, in late 1958. Located in Industrial Basin, the plant has 75,000 square feet of floor space. The investment for plant and equipment was approximately \$3.5 million.

(Continued from page 30)

can be expected to rise from 3 million to well over 4 million and to well over 6 million in all of Western Canada.

"In the decade ahead we expect the most significant industrial developments in those fields which are based on our own easily accessible natural resources. Recent developments point some conclusions:

"1. The approval of gas export permits by the National Energy Board of Canada (and of imports to the U.S.A. by the F.P. C.) is touching off a new wave of activity in the oil industry. Closely allied, of course, are the processing plants necessary before export of gas is possible; already over a quarter of a billion dollars of plants are on the

"2. An early decision is expected as to the best route for a railway from a point in Alberta up to Pine Point on Great Slave Lake. The railway is bound to open up new mineral deposits — and these will be processed and refined in this province. Again the resultant long term benefits to the whole area are presently incalculable.

"Radium, uranium, gypsum, asbestos, lead, zinc, gold, and silver mines are now in operation in the area to be served by the railroad.

"3. Substantial iron ore deposits both in the Crows' Nest and the Clear Hills areas of the province have been assessed and delineated. Early development of these deposits is confidently expected and will

to all other known crude oil reserves in the world.

"With these resources presently being developed and assessed, I have good reason for expecting that the decade of the 1960's will witness unparalleled industrial growth in Alberta."

Manitoba Is Prosperous

Gurney Evans, minister, Department of Industry and Commerce, Winnipeg, Manitoba:

"Manitoba's economic development during 1959 continued at the rapid pace that began immediately after World War II. In the past year industrial growth, road construction, hydro electric expansion, increased retail sales and higher capital investment reflected growing prosperity and confidence in Manitoba. Future prospects appear extremely favourable as current industrial and commercial trends point toward growing markets, increasing development of natural resources and further manufacturing expansion and diversification.

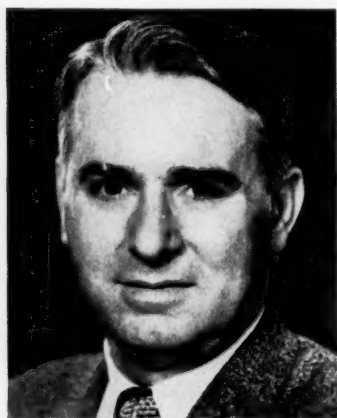
"Manufacturing, Manitoba's leading economic pursuit, has increased steadily since World War II. Gross value of production reached a new peak of \$743.6 million in 1959, an increase of 10 per cent over 1958 and 111.3 per cent over 1946. Estimates are that manufacturing production will reach the \$1 billion mark by 1970.

"Approximately 50 new manufacturing firms have been established in Manitoba each year since the war. In 1959 fifty-three — forty-two in Great Winnipeg and eleven in rural Manitoba — were established to manufacture such products as hosiery, fabricated plastics, food products, stationery supplies, industrial machinery, metal products, kitchen equipment, printing inks and processed vegetables.

"Manitoba's location is ideal for the canning, milling, packing and other food industries that usually locate near farming districts close to their source of raw materials and further expansion, both new and existing, in the agricultural processing industries appears likely.

"Capital investment by the manufacturing industry reached a new peak of \$70.1 million in 1959 of which \$33.7 million was for con-

(Continued on page 34)



"In the decade ahead we expect the most significant industrial developments in those fields which are based upon our own easily accessible natural resources. . . . With these resources presently being developed and assessed, I have good reason for expecting that the decade of the 1960's will witness unparalleled growth in Alberta."—A. Russell Patrick, Provincial Secretary, Minister of Industry and Development, Alberta.

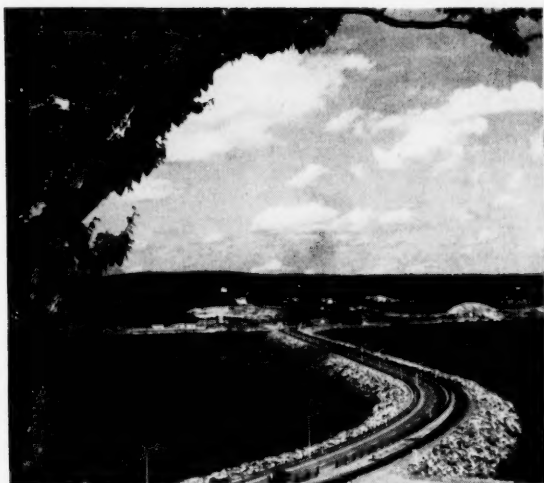
drawing boards, and are scheduled for completion in the next three or four years. These plants will extract propane, butane, other hydrocarbons, and sulphur from our natural gas. The propane and butane will be produced at a rate of around 40,000 barrels a day; the sulphur at a rate of 4,000,000 tons annually — all as a necessary prerequisite to export of the natural gas. In other words, the basic raw materials for petrochemical industry will be produced in this province. The problem will be to balance all the economic factors involved and to decide whether to allow or encourage export of all these basic petrochemical fractions; or whether to insist on their primary utilization in this area.

have a tremendous impact on the economy of Western Canada. Both refining of the ore and fabrication of products presently imported will give significant boosts to our industrial complex and potential.

"4. Finally, it remains to point out the almost astronomical energy reserves existing in the area — in addition to the oil and gas resources now being exploited. Along the Peace and Athabasca Rivers from the British Columbia border to Lake Athabasca are to be found (in addition to several suitable hydroelectric sites) uranium deposits presently ranking among the most substantial in the world, and the McMurray Oil Sands which contain crude oil reserves equal in content

LAND OF VARIETY:

This is the harbor of Victoria on Vancouver Island, British Columbia. One of the many cities connected by the Trans-Canada Highway, Victoria is the capital of the province and is noted for its quaint charm and beautiful gardens.

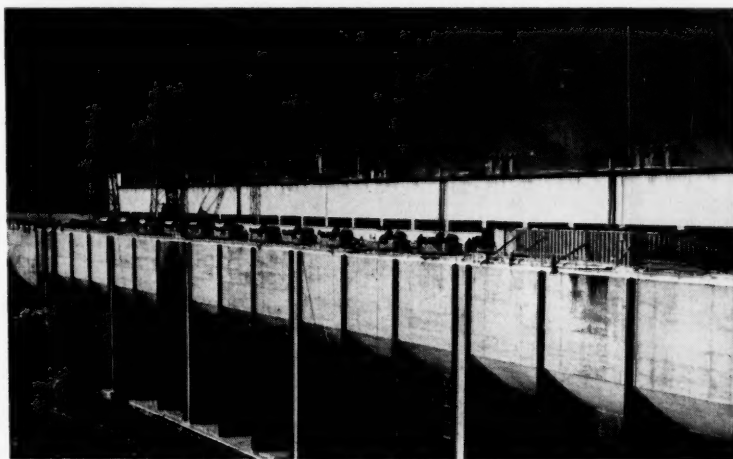


The Canso Causeway joins Nova Scotia's mainland to Cape Breton Island. This view is from the mainland side and shows the rolling, wooded landscape of the island.



Visitors chat with the driver of a surrey at Niagara Falls, Ontario. In the background is the American section of the falls on the other side of the river.

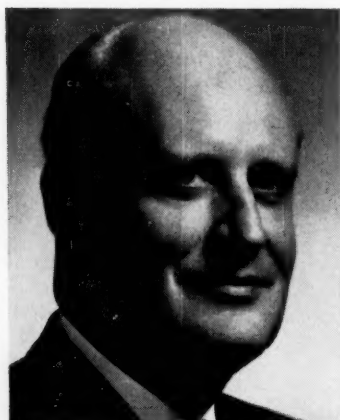
This hydro-electric generating station is being built to provide power to the huge mining development of International Nickel Company at Thompson, Manitoba.



(Continued from page 32)

struction and \$36.4 million for machinery and equipment. This represented a 13.8 per cent increase over the 1958 investment and 267 per cent over 1948, signifying confidence in the future and indicating greater and more diverse production for the sixties.

"Other facilities maintained high levels of capital investment during 1959. Utilities expended \$172.3 million; retail wholesale and financial facilities \$62.3 million; primary industries and construction service \$95.9 million; housing \$81.8 million; institutional services and governmental departments \$134.3 million. Total capital investment in 1959 for all industries and services increased by 15 per cent over 1958.



duction was \$57.6 million of which metallic production accounted for \$27.9 million and industrial mineral production \$18.2 million. Major metals produced were nickel (\$13.7 million), copper (\$7.6 million) and zinc (\$3.8 million) with cement the most important industrial mineral (\$7.4 million) followed by sand and gravel (\$6.7 million).

"Manitoba's mineral production will increase substantially this year with the opening of the Thompson nickel mine of International Nickel Company of Canada Limited, the Chisel Lake zinc mine and the Stall Lake copper mine, both situated at Snow Lake and owned by Hudson Bay Mining and Smelting Co. Ltd. At Bernic Lake, Chemalloy Explora-

plant on the Nelson River will be in operation this year. Planned capacity is 210,000 hp with provision for expansion. A \$140 million plant with planned capacity of 450,000 hp is being built at Grand Rapids on the Saskatchewan River.

"Under the federal-provincial 'Roads to Resources' program which will open up hundreds of sections of previously inaccessible north land, construction has begun on a road from Simonhouse to Thompson via Wekusko and another between Gypsumville and Grand Rapids. An all-time road construction record totalling 2,234 miles at a cost of \$27 million was completed in Manitoba under the 1959-60 program. The largest program yet, involving \$45.6 million is planned for the current season.

"The new roads and hydro-electric stations are attracting the interest of forest products industries to northern Manitoba's vast stands of spruce, pine and poplar. Proposals have been made for a 500-1,000 ton newsprint mill near Wabowden and a 300-400 ton kraft mill around The Pas or Grand Rapids.

"The road program will also increase accessible recreation areas and further advance the rapidly growing tourist industry. In 1959, 1,873,303 tourists spent \$34.5 million in Manitoba and a record \$6 million was invested in tourist accommodation facilities, double the 1958 investment.

"Commercial fishing production totalled 32 million pounds, a 23 per cent increase over 1958, resulting in a 13 per cent increase of both market value and earnings of the fishermen.

"Fur production during 1959 amounted to \$5.1 million of which \$1.5 million was wild fur. The beaver catch that season was the highest in 80 years.

"Agriculture, Manitoba's second leading industry by value of output, experienced adverse weather conditions in 1959 in spite of which gross value of production totalled \$323 million compared to \$322 million in 1958.

"The favourable atmosphere for expansion and development in Manitoba was strengthened greatly by the activity of the Manitoba Government in 1959.

(Continued on page 36)

"Manitoba's location is ideal for the canning, milling, packing and other food industries that usually locate near farming districts close to their source of raw materials, and further expansion, both new and existing, in the agricultural processing industries appears likely."—Gurney Evans, Minister of the Manitoba Department of Industry and Commerce.

"Retail sales increased by 9.3 per cent from \$750 million in 1958 to \$820 million in 1959. Expansion of retail sales is expected to increase as population grows, industrial development continues and the level of income rises.

"Population is growing gradually and at present totals 894,000, an increase of 17 per cent since 1950. At the present rate of growth it is estimated that the population of Manitoba will reach 960,000 by 1965 and 1,045,000 by 1970.

"Development of Manitoba's natural resources was accelerated in 1959 with extensive mineral prospecting and exploration, particularly for base metals. In 1959 the gross value of Manitoba's mineral pro-

ductions Ltd. is renewing lithium operations suspended in 1957.

"The Thompson project, when in full scale production in 1961, will be the world's second largest nickel producer exceeded only by INCO's operation at Sudbury, Ontario and the only fully integrated nickel operation in the free world. Production rate will be 75 million pounds annually and will increase the value of mining production in Manitoba by an estimated \$35 million.

"Daily ore production at Chisel Lake will be one thousand tons and at Stall Lake five hundred tons which will be processed at Flin Flon.

"Power and road development in northern Manitoba is progressing rapidly. The first four of five units at the \$46 million Kelsey power

Québec

NEW MINING DISTRICTS

The mapping of further resources proceeds steadily in Ungava, North Eastern Québec, Abitibi, Chibougamau, Gaspé, the Eastern Townships, etc.

CHEAP, ABUNDANT POWER

Present production of hydro-electric power is now over 9,900,000 H.P. Sufficient for all future requirements available.

NEW INDUSTRIES

Number and production of industries rises steadily. Over 430,000 employees earned \$1,465 millions and produced over \$6.6 billions in 1958.

INTELLIGENT LABOUR FORCE

Labour in Québec is abundant. Enjoys good technical education facilities and learns quickly the most complicated processes.

NEW ROADS, SHIPPING AND COMMUNICATIONS

Over 33,000 miles of paved roads, with first-class rail, air and water facilities give shippers easy communications with all parts of the world.

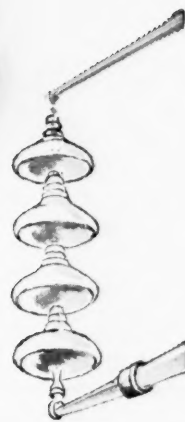
OFFERS EVERY OPPORTUNITY TO INVESTORS

In La Province de Québec the pace of new development is exceeding all expectations. The opening of the new highly mineralized districts of North and Eastern Québec is being paralleled by the rapid-rising rate of production, population, of prosperity in the older centers.

Everywhere opportunities are opening up for investors, business men, farmers and citizens to participate in the wonderful future of La Province de Québec.

LA PROVINCE DE Québec

For further information on Industrial possibilities in La Province de Québec, write: Department of Trade and Commerce, Parliament Buildings, Québec City, Canada; or 50 Rockefeller Plaza, New York 20, N.Y.



(Continued from page 34)

"A program of regional development was instituted to help Manitoba communities develop local resources and the Province is participating actively in submissions to the Royal Commission on Transportation with a view to obtaining lower freight rates for industry and commerce in Manitoba.

"In April 1959 the Government established the Manitoba Agricultural Credit Corporation to meet the farmer's need for long term credit in initial financing and expansion. During 1959, 435 loans amounting to \$4,140,000 were approved.

"The Manitoba Development Fund was established by the Government in February, 1959 to provide financial assistance to new and existing manufacturing industries, tourist and recreational facilities and community development corporations in the Province unable to arrange financing through other sources of credit. To date loans totalling over \$2.75 million have been approved and as a result capital investment in Manitoba has increased by an estimated \$5 million."

British Columbia — Industrial Giant

R. W. Bonner, minister of industrial development, trade and commerce, British Columbia:

"A review of economic progress of British Columbia during the past few decades, through the present, and a projection into the future presents a picture of an industrial giant

growing on the Pacific Coast of Canada.

"Statistics of growth in British Columbia are impressive. Since the first census, in 1891, the population swelled from 36,247 persons to over 1.6 million persons in 1960. In the past ten years the average rate of growth in population in British Columbia was the highest in Canada — about 3.5 per cent per annum. Economic indicators picture British Columbia's spectacular growth. The increase in the labour force in the past ten years amounted to 28 per cent, from 444,000 in June, 1949 to 570,000 in June, 1959. Average industrial weekly wages rose from \$45.65 in 1949 to \$79.00 in 1959. In the same period total labour income rose from \$825 million to \$1,881 million, and personal income increased from \$1,273 million to \$2,790 million. Retail sales, similarly, experienced substantial growth from \$874 million to \$1,692 million and per capita retail expenditures rose from \$785 to \$1,078 within ten years. Even after allowing for the effects of price inflation, these increases are spectacular.

"The record of each industrial sector of our economy indicates the solid progress made by this Province in the past decade. The primary industry, forestry, reached the highest levels in volume of output and in value of production last year; all this despite the uncertainty in the world marketing structure for some forestry products. The net value of production in this sector

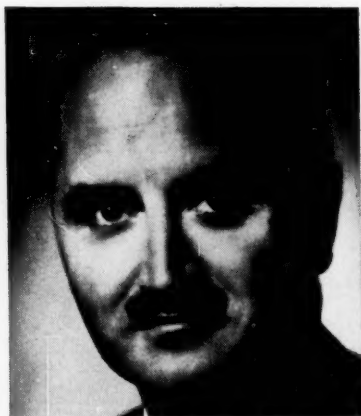
more than doubled over the ten-year interval, 1949-1959, from \$302 million in 1949 to \$672 million in 1959. The production of lumber, pulp, paper and plywood, now account for 40 per cent of British Columbia's total net value of production.

"Mining is second in value of production among the primary industries. Its output in 1959 was worth \$154 million but this was below normal owing to the poor market situation for metals which prevailed during the year.

"British Columbia is noted for its rich and varied base metal deposits. The Province produces most of Canada's lead, much of its zinc and significant quantities of copper, as well as considerable amounts of gold and silver. During recent years, pioneering explorations in the uncharted wilderness of the Province have resulted in discoveries of oil and natural gas in the northeastern part of the Province. Petroleum and gas will soon become major contributors to the mineral production in British Columbia. Their development has been stimulated even further by the completion of a major oil pipeline across the Province from Alberta oil fields to the coast, and a natural gas pipeline from the Peace River area to Vancouver and the Pacific Northwest of the United States.

"Although only about five per cent of all the land area in British Columbia is suitable for agriculture, farming is the third largest primary industry. It contributes a considerable share of the essential foodstuffs for the provincial population. During the last farm census in 1956 there were 24,748 farms situated on a total farm area of 4.5 million acres with farm population in excess of one hundred thousand people. The Lower Fraser Valley, which is located near the industrial heart of the Province and the Okanagan Valley, famed for its fruit production, account for nearly 60 per cent of all the farms in British Columbia. Extensive dairy, market garden, cattle growing, and other farm enterprises provide some \$120 million of cash income to the people of the Province. It is notable that farm cash income rose by a third in the last ten years, even though development of our agriculture was far overshadowed by the spectacular gains

(Continued on page 38)



"By 1970, some 2.2 million people are expected to live on the Pacific Coast of Canada. Our labour force will increase to over three quarters of a million workers. Personal income will be near the \$5 billion mark, and retail sales will almost double to over \$3 billion."

—R. W. Bonner, Minister, British Columbia Department of Industrial Development, Trade and Commerce.



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the right move
in Canada"*

(in confidence, of course)

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It's easy—and profitable—to do business in Canada. But as in business anywhere, "you have to know the ropes." And The Royal Bank of Canada is equipped to show them to you—as it has to so many American businessmen—in *complete confidence*. For a convincing demonstration may we suggest you outline your plans—or problems—to Business Development Department, The Royal Bank of Canada, Head Office, Montreal, Canada.



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the Caribbean area and
South America. Offices in
New York, London and Paris.

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made in the other industrial sectors of the economy.

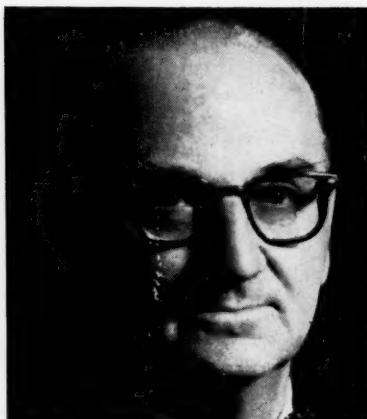
"The provision of electric power has become of major importance in the industrial development of British Columbia. The total hydro-electric capacity of all British Columbia rivers is now estimated at 48 million horsepower but only 3.6 million h.p. has been utilized so far. Economic and engineering studies are underway now to determine the best use of the Peace River in the Rocky Mountain Trench, where approximately 5,000,000 h.p. potential is indicated, and of the Columbia River where a similar potential is possible. Electricity consumption in the province has almost tripled since 1949 and now amounts to about 12¼ billion kilowatt-hours per year.

"In 1959 alone some 170,000 kilowatts of generating capacity were installed by the larger utility companies, and major plants in the various stages of construction will bring another 124,000 k.w. of capacity in 1960 and 157,000 k.w. in 1961. At the current rate of growth in the demand for electricity in the province it is estimated that by 1975 consumption will exceed 30 billion k.w.h.

"Statistics picturing growth in the secondary industries of British Columbia show an outstanding rate of development in that section. During the last ten years, the gross value of manufacturing production in the province increased from \$959 million to \$1,925 million.

"This review of past achievements of our economy provides for an optimistic, even enthusiastic, view of the future developments. A forecast for the next ten years indicates a great increase in the internal market in British Columbia. By 1970, some 2.2 million people are expected to live on the Pacific Coast of Canada. Our labour force will increase to over three-quarters of a million workers. Personal income will be near the five billion dollar mark and retail sales will almost double to over three billion dollars.

"British Columbia occupies a strategic geographical position. It lies astride the land route from continental United States to Alaska and will obviously benefit from the improved transportation facilities which will likely develop from



"While Canada's newest province of Newfoundland has made great strides in 11 years of confederation in modernizing its fisheries, in the setting up of industrial operations to diversify her economy, and in expansion and modernization of its pulp and paper installations, the really big developments catching the spotlight are in the mining field."—J. R. Smallwood, Premier, Province of Newfoundland.

Alaska's statehood. Of even greater significance, British Columbia is a coastal Province and with its products in world demand will achieve long term benefits from international trade."

Mining Spotlighted In Newfoundland

J. R. Smallwood, Premier, Province of Newfoundland:

"While Canada's newest province of Newfoundland has made great strides in eleven years of confederation in modernizing its fisheries, in the setting up of industrial operations to diversify her economy, and in expansion and modernization of its pulp and paper installations, the really big developments catching the spotlight are in the mining field.

"At the present time two major iron ore projects are underway, in Newfoundland Labrador, to cost between them some \$400 million. One of these at Carol Lake being undertaken by the Iron Ore Company of Canada is scheduled for production in 1962. The second at Wabush Lake by the Wabush Iron Limited is scheduled for production in 1964. To bring out some 12 million tons of production of iron ore, both companies are building this year a 40-mile railway line to link into the existing Quebec North Shore and Labrador Railway line en route to the northern St. Lawrence shipping ports. To serve the needs of the two operations a new 120,000 horsepower hydro development is underway by the British Newfoundland Cor-

poration at Twin Falls, Labrador.

"On the Island of Newfoundland the previous mines (iron, copper, lead, zinc, fluorspar, limestone) have been joined by a new copper mine, and a pyrophyllite mine, and a gypsum quarry, since Confederation. In prospect on the Island are several new copper mines, and an asbestos operation.

"In the hydro field, consideration is now being given to the development of the potential on the south coast of the Island of Newfoundland at Bay D'Espoir. Here a possible half million horsepower is awaiting development.

"Over the past few years surveys and engineering studies have been completed for the development of the tremendous hydro resources of Labrador at Hamilton Falls, where four million horsepower can be developed in a single drop at the Falls. This work has been done by the British Newfoundland Corporation, which has built a 110 mile road across Labrador to give access to the power site."

Saskatchewan Attracts Attention

T. C. Douglas, Premier, Province of Saskatchewan:

"Canadians are pleased to see the increasing recognition given to their country's economic development by top-ranking American news media such as the Conway group of business publications.

"This new awareness of Canada by our neighbors to the south has not missed the Province of Sas-

CANADA

katchewan and its post-war growth. To many of you in the States, there was a time when this particular segment of Canada was little more than a place with a quaint name 'somewhere in the grain-growing West.'

"Since the war, American capital and American business people have not had any trouble finding the path to our door. For quite a number of years the province's fame rested on the production of wheat. In the post-war period Saskatchewan made headlines at home and abroad with the discovery and development of strategic minerals in areas extending from the province's southern border to its Precambrian north.

"Uranium, oil, natural gas, potash and other industrial materials from the ground brought new wealth to the province and widened the boundaries of its economic potential.

"Capital flowed into Saskatchewan to finance the mounting pace of resource development and this activity in turn stimulated a growth of manufacturing and service industries.

"At the end of the Second Great War agriculture accounted for almost 80 percent of the gross value of commodity production in the province. In the years after the war the value of non-farm production climbed rapidly and today the dollar value of the output of industries other than agriculture represents more than 60 percent of Saskatchewan's commodity production.

"The past decade was notable for the growth of the province's mining industries. The wealth from mines and oil fields advanced Saskatchewan to fourth place among the Canadian provinces for value of mineral output.

"From a position well down on the production scale, Saskatchewan's mineral harvest climbed from a level of less than \$40,000,000 at the start of the 1950's to a production valued at \$214,000,000 in 1959.

"The abundance of raw materials and Saskatchewan's advantageous position in the centre of the western market area have attracted important manufacturing industries to the province.

"Factory output set a new record again in 1959. The value of manufacturing is estimated at \$341 mil-



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Department of
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Trade and Commerce,
Parliament Buildings, Victoria, B. C.



"The abundance of raw materials and Saskatchewan's advantageous position in the center of the western market area have attracted important manufacturing industries to the provinces. . . . Few provinces in Canada are as richly endowed with natural resources as is Saskatchewan. A great portion of the province is Precambrian, and the outlook for a new mineral industry is very promising."—T. C. Douglas, Premier, Province of Saskatchewan.

lion. It has climbed steadily from a level of \$218 million reached in 1950.

"The post-war period of expansion in Saskatchewan saw a sharp increase in capital investment. The investment figure for the past year is forecast at \$620 million. The fig-

ure is 2.5 times greater than it was 12 years ago.

"Saskatchewan became a producer of steel this year. A basic steel mill near the City of Regina is already making its impact felt on the economy. The mill has spurred the

development of secondary industries using steel for processing and fabricating.

"A vast iron ore body in the province is currently under investigation by mining companies. This supply of iron ore and the existence of a steel mill make the future bright for the province's development as the iron and steel centre of Western Canada.

"Another project which will have a profound influence on Saskatchewan's economic future is the great dam being constructed on the South Saskatchewan River.

"This tremendous development will bring the province the benefits of large-scale irrigation, hydro power, water supply, and recreational and industrial development.

"To keep up with its constantly expanding power needs, the province is proceeding with a second hydro project on the river. This development will be completed in 1963, some years in advance of the larger multi-purpose river project.

"Few provinces in Canada are as richly endowed with natural re-

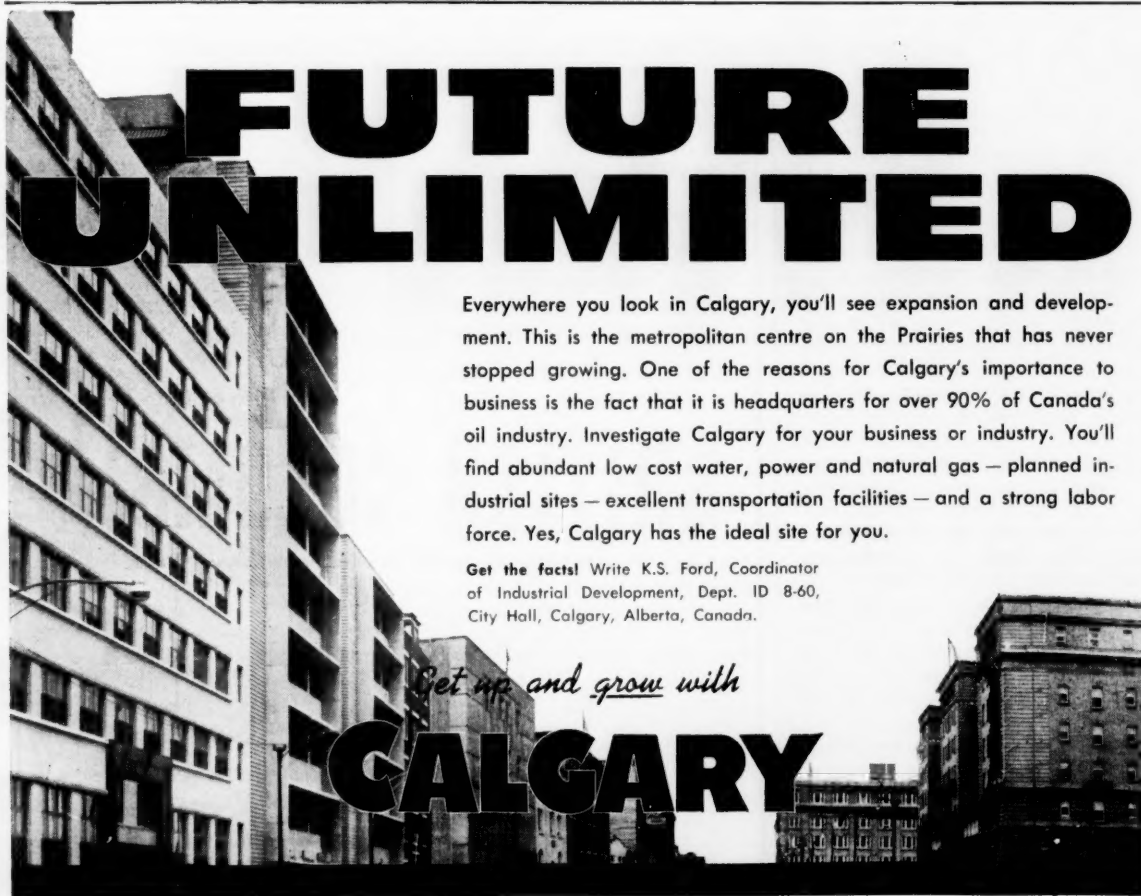
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sources as is Saskatchewan. A great portion of the province is Precambrian and the outlook for new mineral discovery is very promising.

"The sedimentary basin of southern Saskatchewan is producing great quantities of crude oil. Oil production in the province jumped from a value of \$17,000 in 1945 to a value of \$105 million last year.

"The province is said to contain the world's most important potash resources, both in quantity and quality. Two of America's largest potash companies have established mining and refining facilities in Saskatchewan. Other companies are approaching the development stage.

"Saskatchewan's forest resources are substantial and the timber supply is adequate to support three or four large pulp and paper mills. Forest development in the future will make a large contribution to the economy.

"During 1959 the Stanford Research Institute of California completed a study of Saskatchewan's economic progress and its prospects for continuing development.

"The Stanford report made this

appraisal of the province's future:

"In this decade the tempo of industrial and resource development in Saskatchewan has increased at an accelerating rate; this situation is expected to continue. The province faces a future in which diverse types of industry will continue to bring new buoyancy and stability to the economy."

Steady Progress In Nova Scotia

E. A. Manson, Minister of Trade and Industry and Minister of Mines, Nova Scotia:

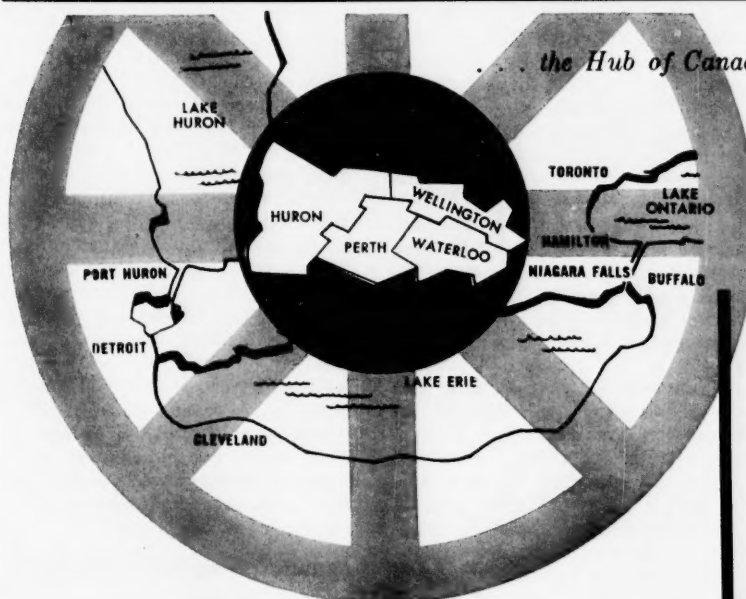
"Nova Scotia's economic progress in recent years has been steady and, though certain problems present, future prospects can be viewed with some degree of confidence and enthusiasm.

"During the early months of 1959, it became apparent that a general recovery from the 1958 economic decline was under way and, when the final figures for that year became available, this promise was upheld.

"Farm cash income and forestry both exhibited solid advances over 1958. In fisheries, though the quan-

tity of fish landed was somewhat less than in 1958, increased returns accrued to the fishermen through higher prices and relatively larger catches among the more valuable species. Manufacturing, measured by the selling value of factory shipments, stood at \$421 millions in 1959 — an advance of approximately five and a half percent over 1958. Mining, with a total value of close to \$60 millions, showed a drop of some five percent in value, mainly due to a substantial decrease in coal production. The over-all picture of 1959, then, was one of steady progress in all industries except mining.

"The early months of 1960 showed further advances and, even in the production of coal, the first quarter of this year displayed a substantial increase over the same period of 1959. In agriculture, the index number for farm prices was up at the end of March and fish landings were close to 25 percent greater than in the first quarter of 1958. Manufacturing shipments during the first two months were up by roughly seven percent over the same period of 1959 and indications were that



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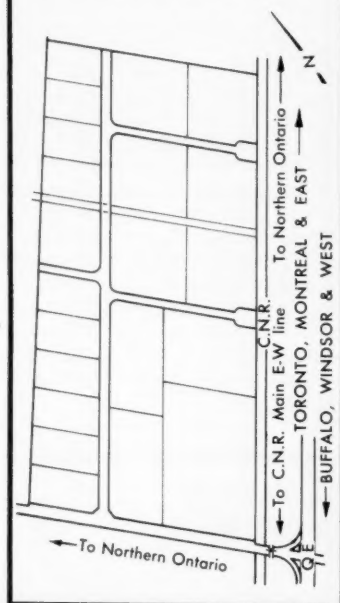
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"Those factors which are usually accepted as symptomatic of economic health were illustrative of solid economic progress in 1959. Electric power generated, retail trade, motor vehicle sales, cheques cashed in clearing centers, and new capital expenditure intentions all showed gains over 1958, and figures for the first quarter of 1960 . . . show continued advancement."—E. A. Manson, Minister of Trade and Industry and Minister of Mines, Province of Nova Scotia.

the first quarter figures, when available, would also show a healthy advance over 1959.

"In 1957, the government of Nova Scotia established a crown company, Industrial Estates Limited, as an autonomous corporation charged with the promotion of secondary industry in the province. The terms of reference of this company included the attraction of new industry to Nova Scotia and the encouragement of existing industry to expand and diversify.

"Among the larger individual enterprises recently established in the province or presently in the course of being established are a \$40 million chemical pulp mill in the Canso area, a new oil terminal with large storage and wharf facilities in the same area, a new international airport at Kelly Lake and a \$12 million development at the existing RCAF air station of Greenwood, a plant to manufacture elastic webbing and thermal underwear material at Bridgetown and a farmers' co-operative abattoir at Halifax.

"Total construction in Nova Scotia during 1959 was more than 16 percent higher than in 1958, totaling over \$190 millions, and residential construction, measured by housing "starts", was 57 percent greater than during the previous year.

"Highway construction and paving during 1959 included the addition of close to 300 miles of hard surfaced roads, bringing the provincial total to more than 2,850

miles. In addition, a cost-sharing agreement between the provincial and federal governments was signed, providing for a seven-year, \$15 million program of future highway development.

"Those factors which are usually accepted as symptomatic of economic health were illustrative of solid economic progress in 1959. Electric power generated, retail trade, motor vehicle sales, cheques cashed in clearing centres and new capital expenditure intentions all showed gains over 1958 and figures for the first quarter of 1960, where available, show continued advancement.

"The most serious single problem in the economy of Nova Scotia is the present day position of coal. This mineral represents the major part of the value of mineral production in Nova Scotia and involves the employment of a significant number of the provincial labour force. Strenuous efforts are being made to overcome the difficulties, (notably, a shortage of markets), with which the industry is faced. Apart from this, Nova Scotia's future prospects for economic advancement appear bright."

Manufacturing Soars In Quebec

Louis Coderre, deputy minister, Department of Industry and Commerce, Province of Quebec:

"An increase of \$2.5 billion was recorded in the manufacturing production of the Province of Quebec during the last decade; as a matter

CANADA

of fact, the value of factory shipments in 1959 was over \$6.7 billion compared to \$4.1 billion in 1950.

"For 1960, some \$450 million will be spent in the manufacturing sector for new construction, new machinery and repairs. The greater developments are anticipated in the paper products and in the chemical products industries; major developments are also foreseen in the non-ferrous metal as well as in the iron and steel industries.

"Within the last ten years, the Province of Quebec has moved rapidly forward into an era of intensive industrial development. Few countries are witnessing such an economic upsurge and can point to a brighter future."

Further comment about the Province of Quebec's industrial growth was supplied by Charles N. Abbott Realities Ltd., Montreal:

"Industrial growth of the Province of Quebec is being spurred on by several factors:

"The discovery and exploitation of enormous natural resources. Mineral production of the province increased \$72 million in 1959 to a total of \$462 million; shipment of iron ore jumped from nine million tons a year in 1958 to fifteen million tons in 1959 in spite of the American steel strike.

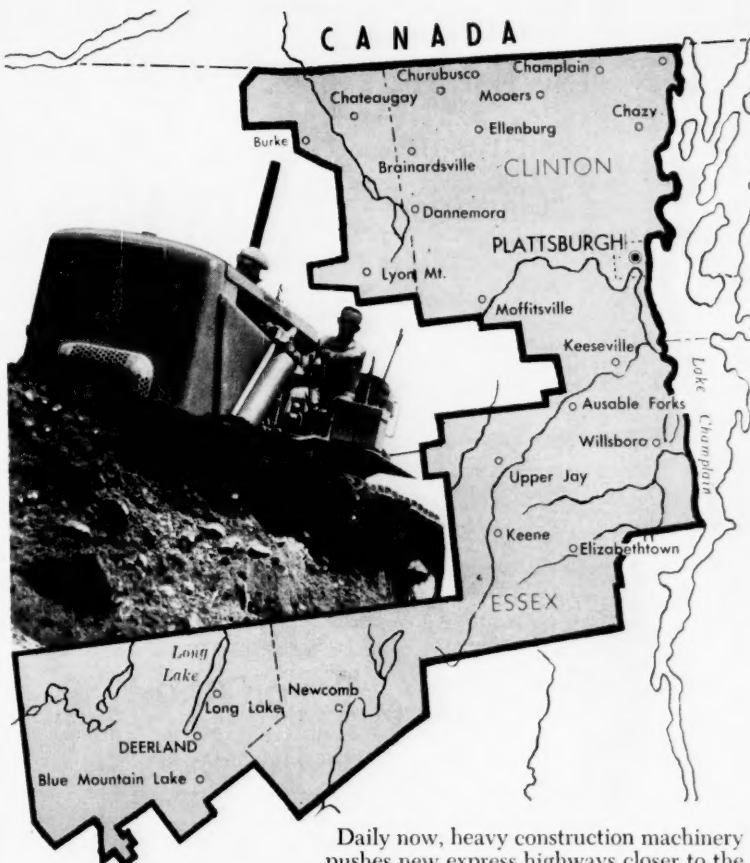
"Rapid increase in population through natural gain and immigration. Premier Barrette estimates that by 1981 Montreal's population will have increased from two million to four million and the number of automobiles in the city in the same period will increase by 251 per cent.

"The development of the province as an industrial complex converting raw materials into finished products rather than being satisfied with their export for conversion abroad.

"Quebec is one of the few remaining areas possessing vast amounts of untapped hydro electric power.

"The opening of the St. Lawrence Seaway, placing the Province of Quebec literally at the gateway to the North American continent.

"Forty-five per cent of the 6,800 acres of the V.V.C. industrial area which my company is developing on the St. Lawrence River South Shore has already been sold and over \$500



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For further information on sites, labor and facilities or confidential surveys for your specific needs, call or write E. W. Bartley, Manager, Area Development, New York State Electric & Gas Corp., 62 Henry Street, Binghamton, New York.

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CANADA

million of new plants built, in the course of construction, or on the drawing boards."

Ontario-A Commerce Focal Point

Of the predominantly English speaking provinces in Canada, Ontario is the largest in area and the wealthiest.

For more than half a century, for example, Ontario has produced half the value of all Canadian manufactures, and it accounts for about 40 per cent of Canada's retail trade.

Further, the more than 10,000 miles of main track in the province haul 39 per cent of Canada's rail freight, and more than 35 per cent of all cargo carried by Canadian vessels in Canadian waters goes through Ontario ports.

About half of the investment income in the country and two-fifths of Canadians' total incomes are reported from Ontario. It also has nearly 40 per cent of Canada's labor force.

Another important factor to the site seeker is the rapidly increasing market within the province. Present predictions are that Ontario can expect a population of seven million by 1966 and about nine million by 1976. The average per capita personal income is 18.5 per cent higher than the national average, and during the past decade personal spending by residents of the province increased by close to 60 per cent.

The utilities have kept up with this growth, as witnessed by the fact that Ontario Hydro and its associated electrical utilities have had a postwar gain of 108 per cent in the number of domestic and farm customers served. It is noteworthy that 99 per cent of the homes in Ontario are electrified.

Additional evidence of expansion is shown by Northern Ontario Natural Gas Company and Twin City Gas Company. With an area population of 308,000, Northern Ontario Natural carries one of the largest industrial loads in the country. It serves 11 paper mills, as well as Canada Malting Company at Port Arthur, the Johns-Manville Asbestos Mine at Munro, International Nickel Company of Canada at Sudbury and, soon, the Dome Gold Mine at South Porcupine and Falconbridge Nickel Mine at Sudbury.

Actually, in an area rich in copper

CANADA

ore, iron, gold, zinc and uranium, to name only a few, the advent of natural gas as a heating fuel for industrial, commercial and consumer usage promises to be one of the largest influences in the development of northern Ontario that has occurred since the development of the railroad.

In the over-all expansion picture, Ontario for the past two decades has invested about a billion dollars a year in developing natural resources, expanding industry, and providing community and utility facilities. In recent years, the total new capital investment has been more than two billion dollars annually. On the average, Ontario's over-all plant, equipment and other assets are increasing — in physical volume — at a rate greater than 6 per cent a year.

Keeping pace with national and world demands for the products that Ontario can provide, the province accounts for more than a third of Canada's value of construction, about 50 per cent of the nation's metals, and more than a quarter of the agricultural output, all in net value terms.

A recent study prepared for the Royal Commission on Canada's economic Prospects has this to say about Ontario: "A growing domestic demand for consumer goods and durable commodities arising out of capital expenditures in the province as well as elsewhere in Canada also directed a high proportion of investment into secondary manufacturing. . . . In more recent years there appears to be a relatively greater emphasis on resources development, notably on the forest products and mining and mineral processing industries and a new growth of industries designed to provide the basic materials for further industrial processing. . . ."

An example of the pattern of growth that you may expect to see continuing in Ontario is a development at Toronto. A 1960 building program covering construction of 420 houses by a new subsidiary company was announced this past May by Bramalea Construction (Peel) Ltd., a subsidiary of Bramalea Consolidated Developments Limited.

Altogether, virtually anywhere you look in Ontario today you will find evidences of rapid develop-

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CANADA

ment, and you will be impressed at the potential that remains for the growth of new and further-diversified industrial plants.

More Power In New Brunswick

While the level of economic activity in New Brunswick has traditionally been — and still is — determined by the export trade, the production of pulp and paper, lumber, metals, fish and potatoes for world markets are factors of the greatest significance in the determination of the level of income and employment within the province.

Altogether, the recent expansion of capital expenditures in the private sector of the economy, combined with the province's power development, have provided a sound base for the future utilization of mineral, forest and other resources at an accelerated rate.

Among significant recent developments was the completion of the \$30 million Beechwood hydro development on the St. John River. This added 72,000 kw to the province-owned utility's grid system, and some 150 miles of 138-kv transmission lines have been built.

The Beechwood development is part of the provincial government's power construction program designed to promote the accelerated industrialization of New Brunswick.

Of particular interest to the site-seeker is that emphasis in this program is being focussed on the expansion of the pulp and paper industry, as well as the development of metallurgical industries based on the province's extensive deposits of base metals.

It is estimated that during the first half of last year saw-log production in New Brunswick from crown lands was more than 20 per cent above the like period of the previous year, with the over-all cut running at a value of around \$50 million.

Significant in the industrial picture is a fish-processing and freezing plant recently put into operation at Beaver Harbor. It has a capacity of 20 million pounds a year.

To speed transportation in the province the New Brunswick government has a continuing program of road improvement. Expenditures for this totaled more than \$30 million in 1958, and it is estimated that

tourists in the province spend close to \$40 million a year in the province.

Prince Edward Island

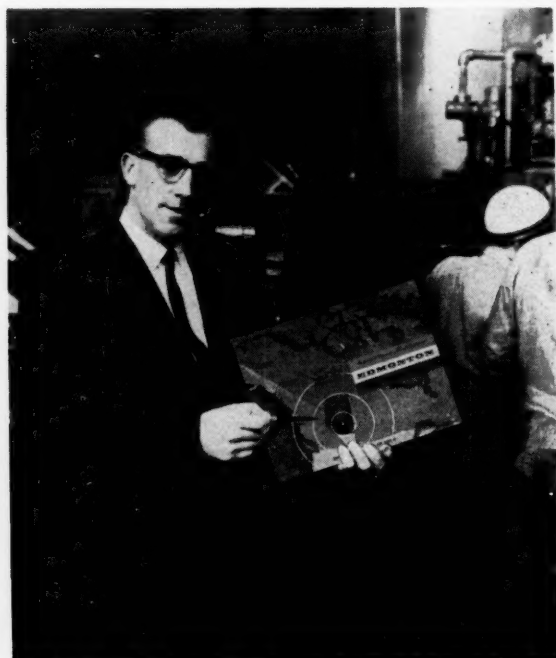
With an economy based upon agriculture, fishing and tourism, in that order, Prince Edward Island is the smallest of Canada's provinces.

Miles of clean ocean beaches and an admirable summer climate have made P.E.I. a mecca for tourists. Substantial expenditures have been made every year on highway and accommodation improvement in order to make the visitor's stay more enjoyable.

Among P.E.I.'s agricultural crops, potatoes lead, both seed and table stock. These are sold throughout Canada, the United States, the British West Indies and parts of South America. More than half of Canada's seed potatoes come from P.E.I.

Latest available figures show that fishing, the second largest industry, brought an income of \$3.5 million in 1958. New on the island is a filleting and fish meal plant which processes some 10 million pounds annually.

Important, too, is the dairying industry, the raising of bacon hogs,



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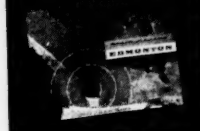
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and sheep-farming. It is expected also that the frozen foods business on P.E.I. will develop into a million-dollar enterprise.

Comments by Industrialists

To give you further information about development and growth prospects for specific industrial operations in Canada, I.D. also asked for comments from executives of a cross-section of Canadian companies.

Here's what those respondents had to say:

E. H. Parsons, director of industrial development, Calgary Power, Ltd., Calgary, Alberta:

"The Industrial Development Department of Calgary Power Ltd. has had a greater number of industrial enquiries so far this year than it had for the same period in 1959. It is believed that this greater interest in Alberta is due to two factors: (a) The anticipated approval by the National Energy Board to export natural gas to the United States, and (b) rising freight costs on bulky and heavy items from the established industrial areas of Eastern Canada."

"The National Energy Board ap-

proved gas export on April 2nd. The reaction in the oil and gas industry was immediate. Associated industries at once began to look deeply into their position. The picture was a pleasant one. Construction of some 500 miles of 'big inch' pipe line is assured with Alberta's two mills, Camrose Tubes Ltd. and Big Inch Company Ltd. of Calgary guaranteed enough orders to keep them going for the next three years.

"Confidence is one thing Albertans exude these days even in the face of a prediction of lower farm cash income in 1960 and a poor year in the house building trade. With expenditures on capital works at \$690 per capita, the highest in Canada, labour has little to worry about."

G. L. Harrison, vice president and general manager, Canadian Tappan Limited-Gurney Products Limited, Montreal:

"Progress in our field in Canada, which is the domestic cooking appliance industry, generally follows the pattern of development of the U.S.A. This is due necessarily to the close association of subsidiary com-

pany to the parent organization, and the Canadian consumer who is in the main not much different from its U.S. counterpart.

"Despite the high level of activity predicted for 1960, the economy will not be without its problems. Foremost, amongst these will be increase competition not only from domestic products but also from foreign sources, due to the growing amount of excess capacity in many countries of the free world.

"Consequently, there is now a greater onus on us — as Canadians — to improve our efficiency if we are to retain a proportionate share of our home market.

"We are positive there is a terrific opportunity for our Company in the decade ahead if we are willing to take the time to plan — work — and sell. Canadians welcome this opportunity."

W. Ornstein, president, British Motors Limited, Toronto:

"Progress in our activity in Canada was within the general trend of the imported car field of which we are a part. Our sales volume has increased. The intensification of

Profit by SASKATCHEWAN'S growth

Saskatchewan, the new industrial centre of Canada, in recent years has experienced a tremendous industrial growth, sparked by the discovery of an abundant mineral wealth.

From the Northern Pre-Cambrian area of the province to the Southern rolling parklands and wheatfields a variety of important minerals, including oil, potash, uranium, iron ore and industrial minerals have been found in great quantities. Allied to Saskatchewan's development of Power and Natural Gas, this new found industrial potential is changing Saskatchewan's economy to one of tremendous progress and prosperity.

Investigate Saskatchewan as the ideal Canadian location for a branch operation or the establishment of a new business.

Profit by Saskatchewan's "Industrial" growth.

PROSPECTS FOR GROWTH

A digest of the complete economic report on Saskatchewan compiled by the Stanford Institute, Menlo Park, California.

Address your enquiry to:

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GOVERNMENT OF SASKATCHEWAN**

Hon. Russ Brown, Minister

D.H.F. Black, Deputy Minister



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CANADA

the small car market by the appearance of more and more various makes and models has definitely increased the overhead as far as expenses for promotion and sales activities are concerned and decreased the net profit.

"My confidence in the future of Canadian Business is I would say unlimited, because my past experience in various fields in the Canadian industry and Canadian business in general make me realize that the resources of trade, commerce and industry have not been exhausted by far and there are lots of possibilities to increase the economical potential of Canada for quite a long time to come."

C. A. Pollock, president, Dominion Electrohome Industries Limited, Kitchener, Ontario:

"While the television market is trending to smaller volume due to a lag in replacement business and a slow development of use of second sets in the home, car radios, portable phonographs, fans, humidifiers, Deilcraft furniture, small motors and technical products enjoy continuing good sales. The sale of Canadian-made transistor radio sets has been sharply reduced because of heavy importations from Japan.

"In all other areas in which we are interested, the outlook is excellent. This applies particularly to our furniture business and our small motors and technical products. Increased sales of the latter in the United States are expected to materialize this year.

"Canadians have been overly dependent upon others in these areas for more opportunities are needed for Canadian creativeness in the fields of design, engineering, research and for larger scale production. From the greater exercise of these professional pursuits in our secondary industries will grow an ability to compete in world markets as an industrial nation. Herein lies our opportunity and our challenge."

A. G. Sinclair, vice president of Canadian Johns-Manville and general manager, Canadian Products Division, Ottawa:

"By the end of 1960, with the completion of a plant at Toronto for the manufacture of Thermobestos, a molded high temperature insulation, and certain fiber glass products, Canadian Johns-Manville will pro-

duce 95 percent of all J-M products for the Canadian market.

"As for Canada as a whole, I think 1960 should be one of the best business years in its history. I do not mean that there will be a runaway boom. Rather, I anticipate a restrained, but nonetheless healthy, rise in business activity. The weakest part is the residential construction field which has never been in a more unpredictable state, but the next month or six weeks should provide a definite pattern for the balance of the year.

"The long-term prospects for Canada are excellent. During the next decade we should be able to look forward to a strong and expanding economy. However, I would temper my optimism with a little caution. Although the trend of business activity should be upward, we must expect the usual ups and downs in some industries.

Norbert G. Schmidt, president, Cluett, Peabody & Company of Canada Limited, Toronto:

"After the Second World War and the Korean War, a large share of the consumer's dollar was going into expenditures for homes, automobiles and appliances, and too small a share was going into men's furnishings. This need, as far as the consumer is concerned, has now been satisfied, and through more promotion by our industry a more proportionate share of the consumer's dollar is now going into men's furnishings.

"As competition has increased, national brands have put their emphasis on quality and value and are obtaining a stronger position in the industry at the expense of unbranded lines. Style and colour, as part of fashion, have been the keynote in the industry's promotion. For example, for the first time the Canadian male has awakened to the possibilities of lightweight shirts, with the end result that Father's Day business assumes new proportions and Spring business becomes more than a lull in the industry's year.

"There is no question that the Spring of this year will show further increases in business, while Fall — at the worst — will equal the record Fall of 1959."

G. B. Gordon, president Dominion Textile Company Limited, Montreal:

CANADA

"In our business, namely cotton manufacturing, the industry has kept abreast of the times more particularly as regards the new finishes imparting "easy-care" properties to cotton shirtings, printed dress goods, and bed sheets. All the basic manufacturing processes plants have installed or are installing the latest machinery developed for high-speed drawing, long draft roving and spinning, automatic winding and weaving. Continuous bleaching both in the rope form and open-width is also being practiced.

"We believe that in the next few years an increase in population will lead to an enlarged domestic market for textile products which, if supplied to a greater degree by the Canadian industry, will have an important effect on our volume of business and on the cost of production.

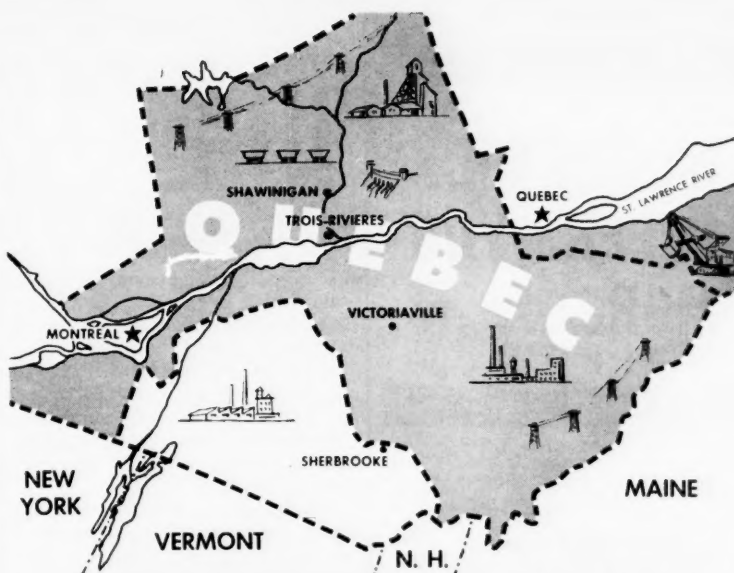
L. D. Smithers, president, Dow Chemical of Canada, Limited, Sarnia, Ontario:

"1959 was a good year for Canadian business. Consumer spending rose slightly more than 7 per cent over 1958, and all manufacturing increased by about 6 per cent. Canada's Finance Minister, Mr. Fleming, had forecast a growth of about 7 per cent in our Gross National Product, and his prediction proved to be very accurate.

"Chemicals and allied products did not keep pace with the economy, increasing only by about 3 per cent. Some chemicals, such as fertilizers, and many organics made almost no advance, whereas others, including plastics and most consumer products, kept pace with the G.N.P.

"During 1959 chemical imports increased by about 12 per cent, accounting in part for the rather erratic performance of the domestic industry. Although economic pressure from chemical imports will continue, Canadian producers should, with modest tariff adjustments, be able to compete against other chemical manufacturers because the industry is efficient and strategically located to serve their markets.

"Chemical companies in Canada will continue to expand, partly because growth is characteristic of the industry, and partly because Canada's natural resources and stable economy inspire considerable con-



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Industrial Development Department

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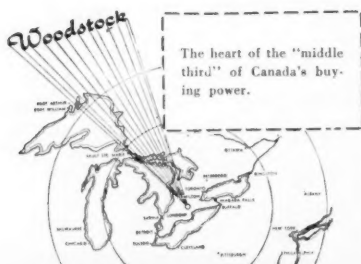


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Address inquiries to:

H. N. Ubelacker
Industrial Commissioner
6 Perry Street
Woodstock, Ontario

CANADA

fidence in the country's long range future."

G. Ross Herington, president, H. Corby Distillery Limited, Montreal:

"In my view, the long term prospects of our industry in Canada are encouraging. Provincial legislation, which covers the distribution and consumption of beverage spirits in Canada, is being improved slowly but surely year by year, following the lead of public opinion. Unfortunately, however, the industry is burdened by heavy Excise Duties and Sales Taxes which were increased on April 10, 1959.

"As to the future of Canadian business, the buoyant forecasts made early in the year have been somewhat tempered since, especially in view of international competition. There is still a feeling that the Canadian economy will continue to progress after some settling down period."

H. E. Langford, Chartered Trust Company, Toronto:

"For Canadian trust companies 1959 was again a satisfactory year with higher profit margins being reported. Assets under administration increased some \$70,000,000 or close to 10 per cent over and above the previous year's level. A marked improvement also took place in trustee pension funds. Further progress was made on the legislative front involving technical issues of importance to Trustees. The rising confidence and public acceptance of trust companies encouraged new branches to be opened.

"Within the next few years, it is confidently anticipated that:

- "1. Approval will be obtained to broaden the investment powers of trustees to include preferred and common stocks (a consideration not presently available in many of the provinces).
- "2. The tendency to change from insurance plans to trustee plans will continue to provide good opportunities for trust companies to expand pension trust activities.
- "3. A more competitive and vigorous policy will be embarked upon to expand operations by the opening of further branches, particularly in or near shopping centres in Metropolitan areas.

F. W. Nicks, president, The Bank of Nova Scotia, Toronto:

"The Canadian banking system is continuing to develop to meet the needs of our growing economy. During the past year 212 new branch offices have been opened across the country, bringing the total number of bank branches to well over 5,000. In terms of Canada's population, this is more than twice the number of banking offices in the United States.

"The most important developments in banking during the past year have been in consumer lending. In October 1958 The Bank of Nova Scotia announced its Scotia Plan Program and since then other banks have introduced their own plans to make loans available to individuals at reasonable cost for a wide variety of purposes. Thousands of Canadian families have been able to use these loans to finance major purchases and to re-organize and plan their household finances more efficiently.

"Canada's resources are being explored and developed. Major projects are going ahead in iron ore, non-ferrous metals, steel, and pulp and paper; and official Canadian approval has recently been given for several large natural gas pipeline undertakings. Even so, this process of development has a long way to go, and continued large investment in Canada's rich natural resources can be confidently expected."

N. J. McKinnon, Chairman and President, The Canadian Bank of Commerce, Toronto:

"In Canada, the banks, through their many branches, maintain a close watch on the widespread activities of the Canadian economy. The large number of new branches opened in the post war years has enabled the Canadian banks to play important parts in the development of the country's industrial and natural resources. There is no doubt that the skills and contacts developed through this network will continue to contribute to the guidance of new activities in Canada in the future.

"The growing competition in the world economy is causing concern to some Canadian as well as American businessmen. In the long run I am confident that they will respond to the challenge most capably. The Canadian economy, based as it is on

CANADA

a wealth of natural resources, cannot help but respond to the increasing demands throughout the world for more and better products."

S. D. Brownlee, president, Canadian Admiral Corporation, Ltd., and president, Electronic Industries Association of Canada, Port Credit, Ontario:

"Electronic home products — This segment of the industry has been very seriously affected by the rising rate of importation of radio sets, particularly from the low wage countries of the world. Unemployment has been caused in the industry as a result of this importation. Although radio sales have increased during the past year, over 80 per cent of this increase was due to imported radio sets. The industry is now combatting this problem by putting on the market radio sets of superior quality at prices that are, in many cases, about the same or even lower than the prices of comparable imported products.

"The industry is optimistic about television sales in 1960 due to the replacement market which should open out during the year. Sales of second television sets in homes already equipped with a set will also increase.

"During the early 1960's the industry is looking forward to the opening of more television stations in the large metropolitan areas.

"The industry is looking forward to increased activity in the stereophonic field, particularly in stereophonic broadcasting in 1960."

H. W. Cowan, vice president and general manager, Daystrom, Limited, Toronto:

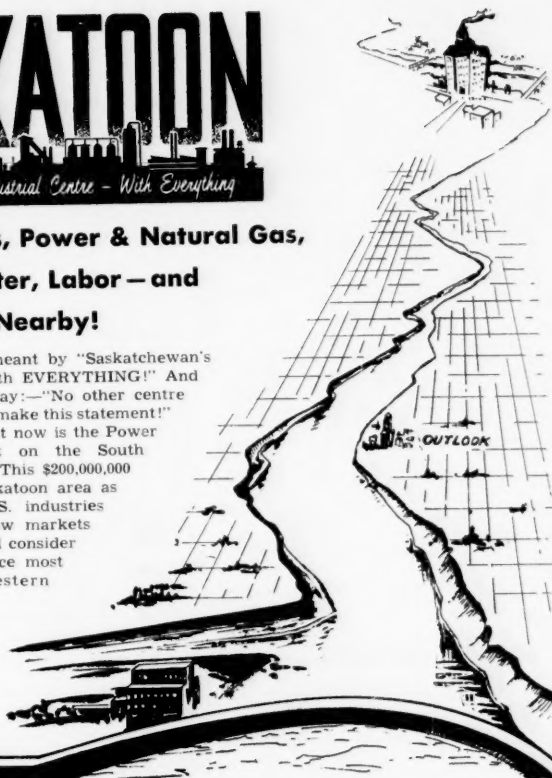
"Our progress in Canada has met and exceeded our expectations and future business increases seem probable. As concrete evidence of our past success and confidence in the future, we are currently completing arrangements for a move to a new and considerably larger Toronto headquarters.

"For the immediate future, we anticipate a growing Canadian market for electronic equipment and one that is much more competitive. Increasing activity on the part of Japanese and Central European manufacturers will have to be countered by North American suppliers.



Raw Materials, Power & Natural Gas, Industrial Water, Labor — and Rich Markets Nearby!

... this is what is meant by "Saskatchewan's Industrial Centre—with EVERYTHING!" And it is also correct to say:—"No other centre in Saskatchewan can make this statement!" But the big news right now is the Power & Irrigation Project on the South Saskatchewan River. This \$200,000,000 project is in the Saskatoon area as illustrated here. U. S. industries looking north for new markets and plant sites should consider Saskatoon as the place most central to all Western Canadian markets.



WRITE TODAY for details as to power, water, natural gas supplies, labor and industrial sites to S. G. Fawcett, Industrial Development Officer, City of Saskatoon, Saskatchewan, Canada.

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write wire phone

Mr. THOMAS J. FLOOD, Commissioner,
Stratford Industrial Commission,
51 Albert Street,
Stratford, Ontario, Canada

CANADA

"In a growing nation, business prospects are always good and anticipated sharing of defence contracts with the United States will be of help to Canada's electronic manufacturers."

E. D. Loughney, president, The British American Oil Company Limited, Toronto:

"Preliminary first-quarter results indicate a six per cent gain in Canada's Gross National Product, paced by increased exports which are running 23 per cent ahead of the 1959 first quarter.

"Against this generally favorable background, the Canadian petroleum industry looks for a 10 per cent increase in crude and condensate production to 550,000 barrels per day this year, compared with a 12.2 per cent increase in 1959.

"Gross production revenues from both crude oil and natural gas are expected to reach a record \$534 million in 1960 — approximately \$54 million more than last year.

"Natural gas sales, which rose from \$19 million in 1958 to \$26 million in 1959, will be spurred to new heights as a result of gas export permits recently granted by the Canadian Government.

"The four new permits are for export of 6.5 trillion cubic feet of gas to the U.S. over the next 20 to 25 years. By 1963, assuming that final approval will soon be forthcoming from the U. S. Federal Power Commission, Canadian gas sales to the U.S. should reach \$93 million annually — an important step towards a more favorable balance of trade between Canada and the U.S.

"As a result of gas export, approximately \$1 billion will be invested over the next six years for transmission and processing facilities — including about 20 new plants.

"The Canadian Petroleum Association has estimated that the new exports will provide nearly \$500 million to gas producers in the period 1961-68, and that total new revenue to the industry from gas, oil and by-products over the next quarter century will be at least \$1.85 billion.

"Demand for refined products during 1960 is expected to increase about five per cent above the 1959 figure of 765,000 barrels per day

which, in turn, was eight per cent ahead of 1958.

"Refining capacity, at 870,000 barrels a day by the end of 1959, is currently about two years ahead of requirements. As a result, growth of refining capacity slowed to 42,000 barrels per day during 1959, compared to the average yearly increase of some 70,000 barrels per day during the previous four years."

More Expansion Seen

An executive of Whitney-Hanson, Limited, a Canadian affiliate of Hanson and Hanson Inc., an American concern which recently completed the \$9,600,000 Confederation Building in Newfoundland, and is currently building the \$14,000,000 Memorial University, foresees tremendous expansion for Canada.

The spokesman is James E. Hanson, vice-president of Whitney-Hanson, Limited of Kitchener, Ontario and St. Johns, Newfoundland.

Hanson said: "The arranging of financing by outside sources makes projects such as these possible, bringing tremendous benefits to Canada's economy." He emphasized that 90 per cent of the labor and materials in the Confederation project were Canadian and that the same percentage applies in the Memorial University Construction Program now at the mid-stage of completion.

Hanson is a top executive of organizations whose specialty is the creation of package arrangements involving the design, financing and construction of industrial, commercial and institution projects. He played a major part in the planning and completion of the new 11-story central administrative headquarters of Premier Smallwood's Newfoundland government. He is playing a similar role in the \$14,000,000 construction program now under way for Memorial University outside St. Johns. Here, five new buildings are being erected for completion by January 1961. There are two other large projects under the aegis of the Hanson Companies in the planning stage in Alberta and British Columbia. In each instance the project comes into being only through the initiative, skills and abilities of top planners, designers, financial experts, builders and engineers, Hanson said.


A COMPANY SURVEY BY



THE INTERNATIONAL GUIDE TO INDUSTRIAL PLANNING AND EXPANSION

CHICAGO ROCK ISLAND

AND
PACIFIC
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COMPANY



Presenting here the second in a series of comprehensive reports on the industrial development activities of major railroads, I.D. spotlights the job that has been and is being done by the Rock Island Lines to help you find a suitable site in a highly diversified territory.

Serving a 14-state territory, including the most highly industrialized areas in the very heart of the nation, the historic Rock Island Railroad has today the most modern equipment to serve your transportation needs, an industrial development department staffed with experts in all phases of plant location, and choice sites at points all along its far-flung lines.

THE ROAD OF

By Jouett Davenport, Jr.

CHICAGO. Just about any day, including a Saturday, that you may happen to drop in at the Industrial Development Department of the Chicago, Rock Island and Pacific Railroad, you are virtually certain to see a bustle of hard work.

In the office of Department Manager P. J. Schmidt, whose desk is full of and surrounded by masses of data for site seekers, there is a continuing round of conferences, telephone calls to and from all parts of the nation, and a general stir of activity aimed primarily at one objective: To help you find a suitable plant location at some point served by the far-flung lines of the Rock Island.

In addition, of course, to the activity here at the home office, Mr. Schmidt and the members of his staff are also constantly taking off in various directions at the proverbial drop of a hat to make direct contacts with prospects wherever they may be.

With a packed suitcase always in readiness and a stuffed brief case to serve as an on-the road office, these men often don't know from one day to

the next where their next destination might be. It all depends upon when and where a "hot" lead may develop.

Since competition for new plants has risen literally to fever pitch among thousands of communities, areas, states and various service organizations, the pursuit of and final acquisition of a new unit can be and generally is a hectic and exciting procedure that can extend over a period of months or even years.

Says Mr. Schmidt: "It can be bumpy, frustrating and just plain nerve-wrecking, but when we know that the project has been brought to a successful conclusion through our efforts, it is one of the most satisfying experiences we can have."

During our extended visit to the Rock Island's general offices, located in the LaSalle Station here, we had ample opportunity to watch and be very impressed by these men at work and to discover a host of things that the railroad has to offer the industrialist.



PLANNED PROGRESS

Examples of Accomplishment

Among the interesting things we found were some specific case histories which will serve to give you graphic examples of how Mr. Schmidt and his staff go about rendering their expert aid. Here are some cases in point:

About three years ago the Industrial Development Department received "out of the blue" a call from a man, who identified himself as being with Goodrich Chemical Company, with an inquiry about possible sites for a chemical plant.

"When we told him we thought we had some excellent locations," Mr. Schmidt said, "he immediately asked us to meet him, and we did so the next day."

A site near Joliet, Illinois, was shown to the Goodrich people. They were pleased with what they saw and, because their allocation was expected to expire within three weeks, were in a hurry to make a decision. They asked the Rock

Island team for more information about availability of utilities, and about the labor situation. The requested data was quickly supplied but, unfortunately, when the site recommendation was presented to the Goodrich management it was rejected.

Nevertheless, the unhappy but undaunted Rock Island team then put in an earnest request that the company representatives take time for a look at other properties that the railroad had to recommend farther south. They were shown a site at Henry, Illinois, which they liked, but a part of the land they wanted was owned by Rohm & Haas Company of Philadelphia, the latter holding it as a possible plant location. The Rock Island men then offered to make a proposition to Rohm & Haas, taking a trip to Philadelphia to do so. The company agreed to the proposition, making the land available to Goodrich. Meanwhile, other members of the railroad's I. D. department were

ROCK ISLAND LINES

compiling information on the utility and labor situation.

"When all this appeared favorable," Mr. Schmidt said, "we still had to clear a hurdle of crossing country roads with a lead track. The job was done, however, and within three weeks from the time Goodrich first called us all arrangements were completed for plans to construct a \$5 million plant. The company likes this site so well that they have since made an expansion at a cost of another \$5 million."

In another recent case, one of the Rock Island's traffic representatives during a routine visit to the Drackett Company learned that the firm was planning an expansion in Texas. The representative relayed this information to the railroad's I. D. men, and this was followed up the same day with a telephone call. An appointment was made with the Drackett officials for the following morning.

As a result of this visit, arrangements were made to meet with top officers at a prospective site in Irving, Texas. Within a week after the first visit to the site, the Drackett people asked for another meeting at Irving and for certain specific aid which included shipping containers of water from Irving for analysis at the home office. When this proved to be acceptable, serious negotiations were entered into, and an agreement was reached for the purchase of the site and for construction of a processing plant.

How all the employees of the Rock Island are solidly behind its development efforts may be in this third example.

For a number of years the railroad had reserved in Chicago a 54-acre plot to be used as a golf course for its employees. The plot was prime industrial land, but it was held until a prospect could be found which would be of sufficient value to the railroad to warrant giving up the recreational area. Subsequently an employee member of the golf course learned that Libby, McNeill & Libby was planning to move its meat canning plant to a new location and might be interested in the golf course site.

The tip was followed up by the Industrial Development Department, and the property was shown to the Libby representatives. Eventually, the Libby choice had narrowed to the point where the recreational property was a strong contender, but at that time the Illinois Highway Department announced that it planned to run a new expressway through the area and would condemn the

needed land if necessary. However, after a series of conferences with representatives of the Rock Island, Libby and the Highway Department, the latter agreed to shift location of the expressway so as to leave plenty of room for the proposed plant if Libby decided to purchase the property.

The company did decide on the location and has constructed a \$12 million plant on the site. It is an interesting sidelight that Libby preserved five of the greens as a midget golf course for their employees.

"This case," Mr. Schmidt stressed, "shows the excellent attitude of our employees where the good of the railroad is concerned."

In addition to giving every possible aid on site selection, the Rock Island also, if the need arises, will give the prospect help in raising necessary financing. In an instance of this sort, which occurred about four years ago, two young men dropped by the Department's office to inquire about buildings available for lease. They explained that they were salesmen for plywood and had decided to start a manufacturing business of their own on limited finances.

The Rock Island leased them an old machine shop building and set them up in business. Within a year they were ready for an expansion but still lacked capital and were unable to raise any on their own. As a result, they appealed again to the railroad's I. D. Department which found venture capital for them and was able to arrange for the loan.

Within another year they were ready to expand again but were able easily to get the money from banks. However, a year later when the third expansion was planned, they found the usual capital sources reluctant, and again the Rock Island stepped in and negotiated arrangements for the necessary money.

"Today," Mr. Schmidt commented, "they have a flourishing business which would not have been possible without our cooperation in obtaining the needed financing through other than usual sources."

An interesting series of negotiations which extended over a period of years involved the Rock Island and two big national companies. Because of the nature of the events, actual names of the firms will not be used here.

One company, served by the Rock Island in St. Joseph, Missouri, approached the Industrial Development Department to discuss acquiring



One of the outstanding big plants served by the Rock Island Railroad in Illinois is this huge facility of Caterpillar Tractor Company at Joliet. The plant is on one of the main east-west lines of the railroad, extending from Chicago to Denver and Colorado Springs. Connections are made, of course, with other rail lines reaching markets and sources of raw materials in all parts of the nation and Canada.

some land owned by the railroad which was wanted for an expansion program.

Situated on this particular land were some yard tracks which the Rock Island used to handle the traffic of another big company. The latter was approached with a suggestion for changing their switching set-up and making the property available to the other firm. The result of this was that the company approached decided at once that they wanted the land and offered to buy it.

This put the Rock Island in the middle, as both companies were big freight customers, and both began putting pressure on the railroad to sell the land.

"Appeals to reason failed to move either side,"

Mr. Schmidt said. "When it appeared that a compromise had been lined up, something happened to alter progress that had been made during the negotiations, and it appeared for many months to be unsolved.

"The problem was," he explained, "to keep company A from building the new unit on a competing railroad line and at the same time keep company B happy. It so happened that the manager of Company B was soon to retire, and with this in mind we kept the negotiations alive, looking toward the day when we could deal with new faces.

"After three years of effort," Mr. Schmidt continued, "when the new manager took over and had a chance to get acclimated, we were able to

ROCK ISLAND LINES

work out a compromise acceptable to all concerned."

There are also many cases, of course, where the Rock Island puts in a strong pitch, and gives all kinds of help, only to see the prospect put his plant on a competing line.

"We can't win them all," Mr. Schmidt says philosophically, "but you will always find us in there trying."

2,885 New Plants in 10 Years

It's a fact, however, that the railroad's development efforts, the facilities it has to offer and the great variety of sites that are available along its lines have resulted in spectacular industrial growth.

Observe, for example, that in the period 1950 through 1959 there were 2,885 new industrial plants established in the areas served by the Rock Island. During the same period there were 925 expansions of existing plants served by the railroad, and temporary installations were set up in connection with 959 projects. The total investment in all this activity by industry totaled more than \$1.9 billion!

During 1959 alone there were 279 permanent new installations established, along with 135 temporary projects and 267 expansions, with an aggregate investment of \$164 million.

Since the Rock Island serves a great part of the nation's "bread basket" area, the hauling of agricultural products continues to be of great importance. The 1950-59 period saw the construction of grain storage facilities with a capacity of 196.8 million bushels. There were also more than 15.5 million square feet of warehouse space added during the past decade.

Last year new grain storage space added on the lines totaled in excess of 32 million bushels, while warehouse area was increased by more than 2.1 million square feet.

Also in 1959 almost 13 miles of trackage was constructed to serve the new and expanding plants, and 39 acres of Rock Island property was sold to industry. At the same time, 714 acres of private property became available for industrial use.

A History of Development Effort

The Rock Island is now in its 108th year of continuous operation, covering a period of some of the most momentous events in the nation's history, and it is a matter of record that the railroad's participation in industrial development activities dates back to the time of its very origin in 1852.

Concerning this, Mr. Schmidt reports: "References in the annual reports of those early years indicate that the intense colonization and industrialization drive coincided with the efforts of the railroad to push ever-farther west to the new frontiers.

"We find in these old reports," he continued, "many references to new industries having been located in the previous years, requiring trackage and from which sources of increased revenue were anticipated in much the same fashion as our annual reports of recent years indicate industrial activity."

A history of industrial development along the Rock Island Lines was written a few years ago by Arthur W. Large, now retired, who was general agricultural agent for the railroad. He began work with the Rock Island in 1905, and during the period from then up to 1950 he was connected with its agricultural and development work, and made a close study of all matters, plans and problems connected therewith.

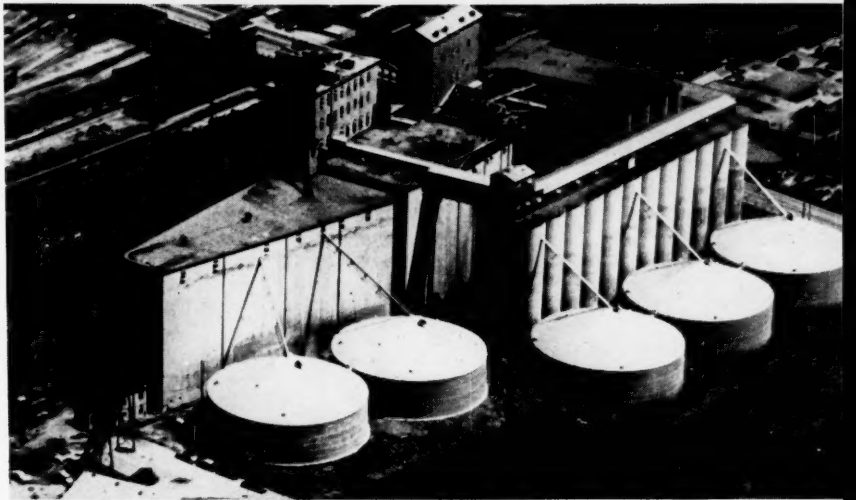
Mr. Large's research shows that in the early years much of the railroad's development effort related to such things as grain storage and dock facilities, as at that time a greater part of what the lines hauled was of agricultural origin. In 1882, for example, grain constituted from 25 to 30 per cent of the total freight traffic.

However, as the years passed, and the railroad's growth continued as a corollary of the burgeoning expansion of the West, there occurred an accelerating pattern of industrial development. This is pointed up in an excerpt from the annual report of 1905: "The promotion of industrial development along the line of your road has been the subject of continued attention. Many new industries have been located. During the year your company constructed or made additions to 124 side tracks to private industries; also a number of coal spurs and extensions were constructed."

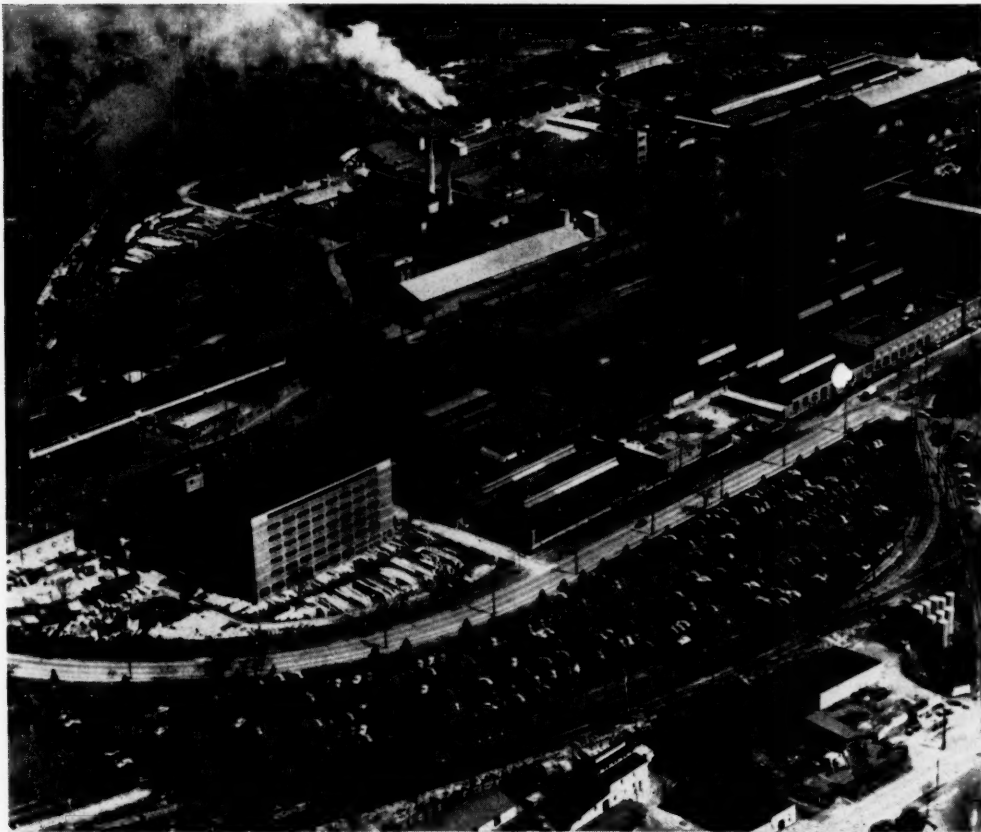
Each year the annual reports duly noted industrial progress along the lines, and the Rock Island's part in it. Then, in 1923, the railroad set up a full-time Industrial Department headed by J. A. Stewart, with R. E. Dugan as his assistant.

The Department was operated by them until 1938, and during that period there were 3,750 industrial plants located on Rock Island lines, with an aggregate investment of \$325 million for plant and investment.

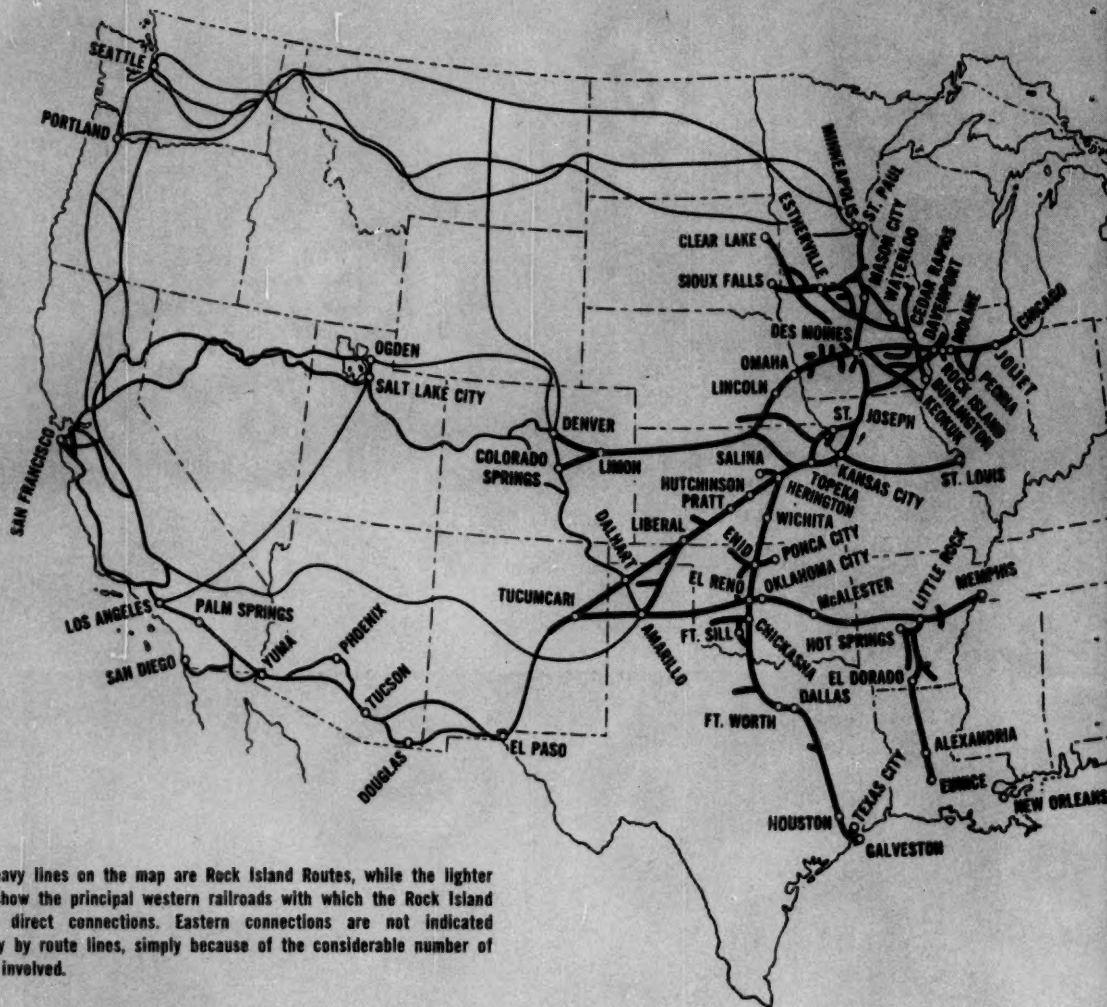
Upon the retirement of Mr. Stewart in 1938, W. E. Bolton was made head of the department.



This huge 7.5 million-bushel elevator at Kansas City, Kansas, is leased by the Rock Island to Simonds-Shields Theis Grain Company. Although the hauling of grain constitutes a considerably smaller percentage of total freight traffic than it did in earlier days of the railroad, it still is a very important part of the Rock Island's activities in the nation's "bread basket" region.



Lines of the Rock Island Railroad serve some of the most important manufacturing centers in the heart of the nation. At highly industrialized Waterloo, Iowa, is this sprawling operation of John Deere Tractor Works is another one of the big plants utilizing the Rock Island's extensive and diversified freight services.



He remained in that capacity until 1953, having been elected a vice president of the railroad. Mr. Bolton was succeeded by R. E. Dugan who had the title of general industrial agent. Upon the death of the latter in 1954, A. F. Hatcher took over the industrial activities, and then Mr. Hatcher was succeeded by Mr. Schmidt in 1955.

Concerning the Department, Mr. Large in his history has this to say: "The organization of the Rock Island's Industrial Department is considered one of the best, if not the best, on any American railroad. Some of the largest railroads in the United States have adopted all or most of the methods of procedure on their own railroads."

The Rock Island Territory

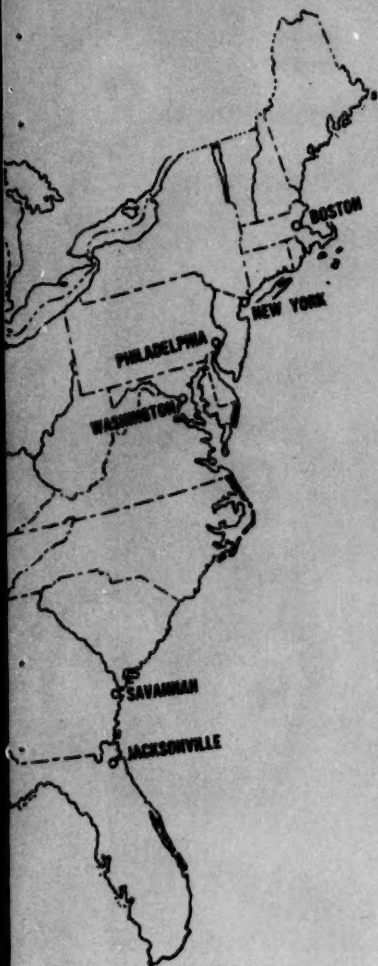
A particular advantage that you have in prospecting for a plant site along the Rock Island

Lines is that the railroad's trackage serves a 14-state territory in the very heart of the nation and, of course, connects with other rail lines extending to all directions in the United States and Canada.

From one end to the other of the Rock Island Lines you will find just about every kind of climate and terrain, as well as scenic beauty, that the nation has to offer.

The north-south routes, for instance, extend all the way from St. Paul and Minneapolis to Eunice, Louisiana, and Houston and Galveston. The east-west routes reach from such points as Chicago and St. Louis to Denver, and from Memphis to Tucumcari, New Mexico.

Principal junctions where the Rock Island connects directly with other railroads are Alexandria



and Eunice, Louisiana; Amarillo, Fort Worth and Dallas, Texas; Denver and Pullman, Colorado; Kansas City, Missouri; Memphis, Tennessee; Omaha, Nebraska; Peoria, Illinois; Tucumcari, and, of course, Chicago. Here, for example, the Rock Island has direct interchanges with no less than 16 other railroads.

Shippers who take advantage of these direct interchange facilities save themselves a priceless amount of shipping time, Mr. Schmidt stressed.

A study of the accompanying route map will show you all the principal cities served by the Rock Island, as well as the points of interchange, and will show you how well the system blankets the center of the nation.

If you are a regional operation, you can find locations on the Rock Island to serve any one of

several areas which are the center of big markets. If you ship your products nationally or internationally, many of the key cities in Rock Island territory are ideally situated for easy access to distant areas. And, if you are looking for water and/or a combination of rail and water transportation, the Rock Island serves important points along the Illinois and Mississippi waterways where excellent sites are available.

On such a location you have access to worldwide shipping through the Port of Chicago's Calumet Harbor in the North and the Port of New Orleans to the South. In addition, Rock Island rail service is yours from plant-side spurs that will be laid to meet special needs.

Facilities for Good Service

In its continuing program to provide better and more efficient hauling facilities, the Rock Island during 1959 acquired 10 new freight diesel units, each of 1,750-horsepower capacity, and five new 1,000-horsepower switching units. This brought the total number of diesel units owned, as of December 31, to 536. Of these, 85 were in passenger service, 269 in freight service and 182 performed switching operations.

Added to the freight car fleet during the year were 700 new box cars and 15 new covered hoppers. Total freight equipment in service at the end of the year was 29,114 cars of all classes.

In May, 1960, the railroad announced the purchase of 550 more new box cars at a cost of more than \$5 million. A number of the cars will be equipped with DF (damage-free) loading equipment. Delivery of the new units is scheduled to begin in September this year.

The 1959 activities include gross expenditures of more than \$4.8 million for additions and betterments. The program embraced flood protection, drainage and bridging at various locations; enlargements of yards at South Chicago, East Des Moines, Topeka, El Reno, Fort Worth, Dallas and Sunray; construction of "piggy-back" tracks and ramps at several locations, especially at Chicago, Denver and Dallas. It was pointed out that the latter improvements were required to handle increased business.

Last year the Rock Island's "piggy-back" service increased by 154.3 per cent and accounted for more than \$5 million of gross revenues. The railroad now has a total fleet of 565 piggyback cars of the most modern and efficient design.

In connection with this phase of the operation, the Rock Island at its 49th Street Shops here has

ROCK ISLAND LINES

facilities for assembling trailer hitches for various manufacturers. A recent project at the shop was the assembling of 400 hitches, designed by Rock Island employees, for installation on 200 new piggyback cars which were manufactured for the railroad by Pullman-Standard Car Manufacturing Company.

Among other recent developments designed to increase efficiency and customer service were installation of new and improved switching facilities at various points, construction of an important rail and truck freight terminal at East Des Moines, and several small depots and auxiliary buildings were modernized or constructed.

Approximately 72 miles of rail were laid, and industry tracks were constructed at 89 locations. In 1959 the Rock Island operated an average of 7,535.30 miles of road, and at the year's end 3,472 miles of track were equipped with automatic signals, including 942 miles of centralized traffic control.

Also during the year improved telephone circuits were installed between several major points in the system, while 24 locomotives, 32 cabooses, six trucks and automobiles, and nine base stations were equipped with radio. As the result of an expansion in main line equipment from El Reno to Herington, the dispatcher at El Reno can now make contact with all trains between those points.

Important, too, in the railroad's extensive service picture are the famous "Rocket" passenger trains which will whisk you comfortably and quickly, and in all kinds of weather, to and from many major centers.

For example, the Rocky Mountain Rocket links Chicago with Colorado, providing independent through service to both Colorado Springs and Denver and taking you through areas of spectacular beauty. Since the Rock Island Lines have numerous connections, you can continue westward for a Pacific Coast tour on a great variety of routes.

Other modern passenger trains, which offer you the best in equipment, and facilities for travel pleasure, include the Twin Star Rocket which operates between Minneapolis-St. Paul on the North and Fort Worth, Dallas and Houston on the South, the Zephyr Rocket which provides overnight service between St. Louis and the Twin Cities, and the Golden State, running between Chicago and Los Angeles, which is operated jointly with the Southern Pacific.

In addition, the Des Moines Rocket and Corn Belt Rocket serve a highly commercialized traffic

between such points as Chicago and Des Moines, Chicago and Omaha, and Chicago and Peoria.

70,000 Materials Tested

Another part of the Rock Island's activities—little known to the public—are the continuous research studies which result directly or indirectly in providing you with faster and more dependable freight and passenger service.

The railroad's testing laboratories, built in 1945, are located in Chicago in a modern building which has 16,275 square feet of floor space. Included in the structure are chemical laboratories and mechanical and electrical labs.

The 32 laboratory engineers and technicians employed in the operation have access to a library which is well stocked with scientific volumes, association reports and other technical literature.

Studies are made on everything from the evaporation of carpet-cleaning detergents to the strength of steel rails—literally everything related to railroad engineering. Altogether, more than 70,000 items of materials supplied by the Rock Island go under scrutiny in the labs.

The laboratories here are supplemented by a mobile unit and three oil control labs in the field. A rail test car, the mobile lab is manned by a three-man crew. It tests all mainline track for internal and external defects, examining about 5,000 miles of rail annually.

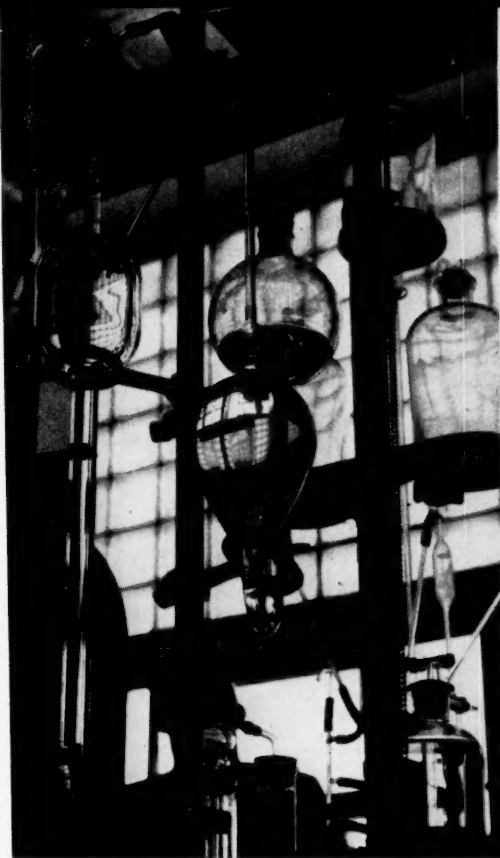
Located at Silvis and Kansas City, Kansas, and at El Reno, Oklahoma, the oil control laboratories take daily samples from the lubricating oil used by every locomotive that comes into the shops. Every day they test from 40 to 50 samples for flash point viscosity.

Since the Rock Island is completely dieselized, it is necessary that the quality of fuel and lubricating oils used be maintained at the highest possible level. To see that this quality is kept, more elaborate tests are conducted in the lab here for carbon residue, sulfur content and potential gum and lacquer formation. A 40,000-power electron microscope, which cost \$10,000, is one of the special instruments used in these tests.

Further, quick analyses are made for extraneous materials in the lubricating oil by a \$25,000 spectrophotograph. It takes only very small amounts of chromium, silicon, iron, copper, lead, aluminum or silver to produce heavy wear in engines, and this instrument can instantly detect the presence of such materials in the oil.

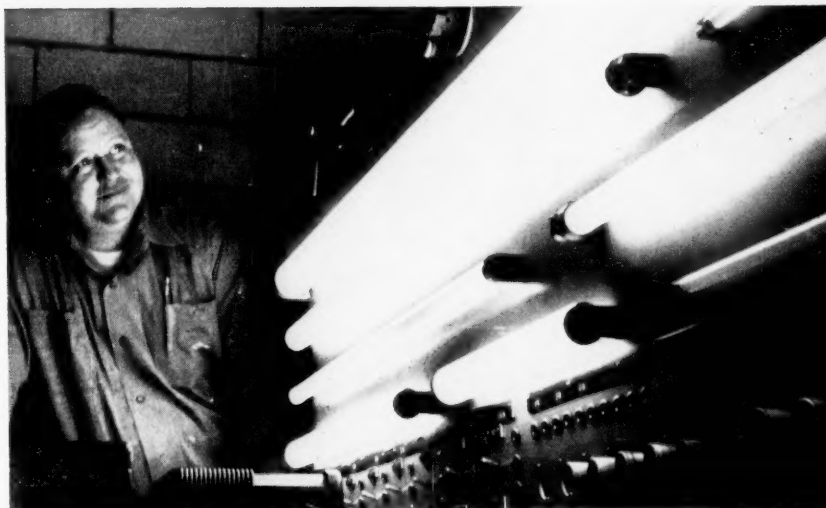
J. P. Muelleman, engineer of tests for the railroad, points out that, "If the spectrograph prevents

The activities of the Rock Island Lines' Testing Department are directed by J. P. Muelleman who holds the title, Engineer of Tests. Among other specialists working with him are the chief chemist, Engineer of Water Treatment, Research Engineer and Chief Inspector.



Chemical analyses of various materials are made in this maze of crystal-like apparatus at the Rock Island Testing Laboratory. More than 70,000 items of materials and supplies used by the Rock Island are tested at one time or another in the laboratory.

The electrical laboratory in Chicago checks out every conceivable type of electrical equipment used by a railroad in depots and on trains. William Roberts, an electrical technician, surveys here a battery of fluorescent lights, ballasts and starters on a master test console.



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only one crankshaft breakdown, the Rock Island feels it pays its own way."

Another impressive piece of equipment is a tension machine which, in testing for weaknesses, applies pressure up to 250,000 pounds on sections of rail until the steel suddenly comes explosively apart.

Items passing through the lab tests include such things as paints for signal arms and equipment; products like flour and molasses on which contamination claims are being pressed; bearings, cylinders and whole engines; electrical and air conditioning systems; cement, coal and ballast; water, batteries and gasoline and, as mentioned earlier, even detergents.

Altogether, no matter what the research problem may be that a railroad can encounter, the Rock Island's laboratories are set to tackle it.

Planned Industrial Sites

At key points all along the Rock Island Lines, from east to west, north to south, are sites of varying sizes and characteristics with such basic necessities readily available as power, labor, fuel and water, along with access to raw materials and ever-expanding markets.

Besides the many privately-owned and developed industrial areas located along Rock Island tracks, the railroad also owns a number of industrial districts which have been subdivided, streets constructed and utilities brought in.

The Rock Island districts, and acreages still available in each, are as follows: Rock Island, Illinois, 21 acres; Denver (Airlawn and Sandown), 168; Little Rock, 29; Oklahoma City, 62; Dallas (Irving), 79, and Colorado Springs, 52 acres.

In addition, the railroad has two more districts planned. These are at Des Moines, where 165 acres will be available, and at Fort Worth, where 480 acres are being offered. At these two points the Rock Island is in the process of planning the street layouts and making arrangements for bringing in all essential utilities.

Privately-owned industrial districts served by the Rock Island have a total of 9,064 acres. Of this 2,748 acres have been sold to industry, leaving 6,316 acres available for additional plant sites.

"At the present time," Mr. Schmidt notes, "we are working with many communities and private developers who are planning industrial areas for the future. There are 4,079 acres in this category. Some of these areas will be opened in the near future, while others are two to 10 years away.

"To keep abreast of the industrial future

throughout the country," he added, "we feel it is essential that long-range planning be done in order that a continuous source of land will be available along our lines to meet the needs of industry."

As part of its program to call these sites to the attention of industry, the Rock Island has special brochures available giving information about the districts it owns, as well as brief sketches about the communities in which the districts are located. The Industrial Development Department also has available brochures describing the privately-owned industrial parks served by Rock Island Tracks. Further, the railroad conducts a continuous advertising campaign in INDUSTRIAL DEVELOPMENT and other important periodicals.

Typical of the brochures that are helpful to the site-seeker is an attractive, two-color folder that the Rock Island has produced to promote its Airlawn and Sandown Industrial Districts at Denver. The folder presents pertinent facts about Denver and the districts, as well as maps showing the tracts that are available.

The scheduled advertisements that the Rock Island runs in periodicals stress such things as the various services of the railroad, the advantages of specific localities, and individual Rock Island specialists who are available to give you plant location aid.

Officials said these ads have been very effective, and one campaign that has been running this year has received honorable mention in the highly competitive 1960 advertising awards of the Chicago Federated Advertising Club.

Another effective aid to the site-seeker is the Rock Island's up-to-the-minute file of data sheets giving full information on individual sites and maps of the particular areas or area concerned.

A typical industrial site data sheet lists first, of course, the city or community where the land is, then the exact acreage and specific location, the nature and extent of rail service available, general zoning, a complete summary of utilities there, and a list of persons ready to give further help and information. Copies of these sheets are available to industrialists for the asking.

Also, the railroad's Industrial Development Department keeps a complete file of available industrial buildings in the many communities served.

Details on these sheets cover location, total floor area, nature of exterior construction, number of stories, floor area per story, floor construction, allowable floor loading, ceiling height, column spacing, heating system, elevators and capacity,

The Milan Industrial Park at Rock Island, Illinois, is one of the railroad's planned developments. Facilities already established there are U. S. Plywood Corporation's distribution warehouse (lower right); Kraft Food's warehouse (left of Plywood building); Nash Finch Company warehouse (center, right), and Eagle United's warehouse (top, right).



The area outlined by the dark line is the Rock Island Industrial Park property at Oklahoma City. The line at left indicates the railroad track. Of the 88 acres in the area, 26 have been sold to industry, leaving 62 acres available for other plants. The skyline of Oklahoma City is visible in the background at top.



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sprinkler system and other miscellaneous interior equipment, lot dimensions, zoning, what the building was last used for, rail service; electric, water and gas service; sewer system, terms for sale or lease, when the building will be available, and additional remarks pertinent to the particular structure, along with the names of the Rock Island men to contact in case you are interested.

Cooperative Management

While the burden of the work in promoting the Rock Island's advantages to plant builders and shippers falls, of course, on the personnel of the Industrial Development Department, their efforts are backed up by a progressive management team which gives the Department full support and cooperation.

The Rock Island's officers are J. D. Farrington, chairman of the board; D. B. Jenks, president; Bruce Dwinell, vice president-executive department; Eaton Adams, vice president and general counsel; R. E. Johnson, vice president-operations; F. J. Conrad, vice president-traffic; G. E. Mallery, vice president-personnel; M. Z. Greenley, secretary and treasurer; Harold A. Berry, manager of purchases and stores; D. R. Arnold, general auditor, and William E. Hayes, executive assistant.

Through their administration the aggressive program of improvement and modernization is maintained on the railroad which, in turn, makes a site served by Rock Island trains particularly attractive.

In the 1959 annual report, for example, President Jenks said: "A carefully planned program of improved freight service, with faster schedules, new direct connections with other lines and necessarily increased train miles enabled your railroad, in 1959, to increase its car-loadings, despite the effects of the prolonged steel strike, and to establish a new record high for gross revenues for its 107-year history."

Industrialists who locate facilities in Rock Island territory may be assured, therefore, that the help and cooperation they receive from the Industrial Development Department is the reflection of an attitude and a way of doing business which is characteristic of the entire Rock Island philosophy.

Altogether, the growth and progress record that the Rock Island has chalked up since 1852 may be regarded as pretty solid assurance that the "Route of the Rockets" will in months and years to come keep itself in a position to render an ever improving pattern of service.

One specific development, which came under

consideration late in the fall of 1959, is the possibility of a merger of the Milwaukee Road with the Rock Island Lines.

Committees representing each of the two railroads made preliminary studies to determine whether a full-scale study of such a consolidation should take place. After a review of the preliminary studies, the board of directors of each railroad authorized a full-scale study.

President Jenks says that as a consequence, the engineering firm of Coverdale & Colpitts of New York, the law firm of Sidley, Austin, Burgess and Smith of Chicago, and R. W. Pressprich & Company, New York investment banking firm, have been authorized to make detailed studies. It is expected that these studies will be completed and reports of the findings will be made in the latter part of 1960.

The Men Who Can Help You

Department Head Schmidt, the go-getter we quoted earlier in this report, is a man you can depend on as knowing his business, for his entire 34-year professional career has been spent with the Rock Island.

He began with the railroad as a stenographer-clerk, and through the years he has advanced through such positions, successively, as rate clerk, chief clerk, city freight agent, traveling freight agent, assistant general freight agent, assistant freight traffic manager and general industrial agent. He assumed his present position as manager of the department in 1958.

In this capacity Mr. Schmidt initiates and supervises the activity of his own staff together with that of the field representatives of the Traffic Department who handle the industrial activity at the local level. He coordinates inter-department handling for complete accord of all deals involving approval of management.

Of particular interest is the fact that he promotes industrial development for the railroad by addressing local, regional and national groups. He makes contacts with industrial prospects, financing organizations, industrial developers; helps arrange private financing, and buys, sells and leases industrial property. His duties also include the drawing of contracts for track construction, special leases and real estate sales, as well as the summation of major industrial transactions between industry and management.

Working with Mr. Schmidt in the department here are C. E. Eller, industrial engineer; E. T. Smith and F. E. Nelson, industrial agents, and J.

F. E. Nelson, industrial agent, Chicago.



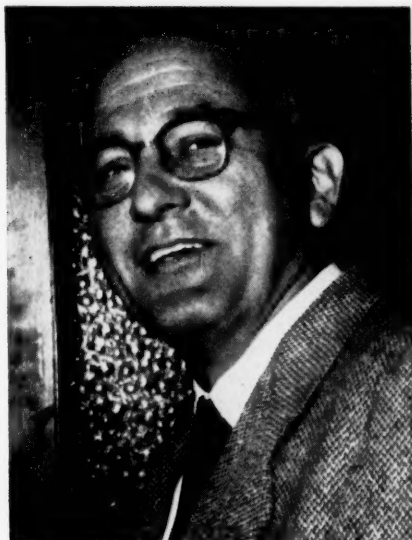
Wayne Gault, industrial agent at Dallas.



J. E. McGreal, assistant industrial agent, Chicago.



C. E. Eller, industrial engineer, Chicago.



E. T. Smith, industrial agent, Chicago.



P. J. Schmidt, manager of industrial development for the Rock Island Lines.

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E. McGreal, assistant industrial agent. Also a member of the department, but working out of Dallas, is Wayne Gault, industrial agent. All these men have varied backgrounds of industrial development work, and each is a specialist in his field.

Charley Eller, a native of Davenport, Iowa, and a Navy veteran, has been with the Rock Island for nine years. Five years of that time were spent in the railroad's engineering department, while he has been on his present assignment for more than four years. Before joining the Rock Island he worked in the traffic department of Minneapolis-Moline Company.

Affable Mr. Eller explains that one of the important phases of the work in his office is "the careful screening of an industrial prospect to determine its long range growth and revenue potential. Next, does the Rock Island have a site available to meet the proposed plant's exact needs? Then, the engineering aspects must be considered: Such things as track alignment and grade, drainage and actual track construction."

Smitty Smith hails originally from Spokane, Washington, but his 33-year business career has been spent entirely with the Rock Island. Beginning as a clerk in the personnel department in 1927, he moved up in 1932 to become a tax clerk in the real estate and tax department. Subsequently he left there as a real estate agent and joined the Industrial Department.

A veteran of untold miles of travel and exhausting leg work, Mr. Smith attests quickly to the fact that "some of these railroad-industry studies require weeks, months, or even years to complete. It all depends upon the size and complexity of the industry involved."

On the industrial staff since 1954, Agent Frank Nelson previously had held positions with Swift & Company and Peabody Coal Company where he specialized in engineering, building design, real estate and taxes. He is an Illinois native, an attorney, and during World War II was a B-29 skipper.

Noting that even "cold" calls on industrialists who had not been considering a relocation had re-

sulted ultimately in the placing of a plant in Rock Island territory, Mr. Nelson allows that there is "no substitute for an early face-to-face contact between the Rock Island men and the officers in the prospect's company who are responsible for expansion."

Jack McGreal, who grew up in Chicago, came to the Rock Island 11 years ago after having worked in the traffic department of U. S. Steel Corporation. Before joining the railroad's industrial staff he worked for five years in the freight traffic department here.

One who thoroughly enjoys his work, Mr. McGreal stresses that "one of the dramatic aspects of industrial development" is the fact that "when a new plant is located in a Rock Island community, it creates new jobs and stimulates the economy of the entire area."

Handling industrial promotion directly in the fast-growing Texas and Oklahoma areas, Agent Gault before joining the Rock Island in 1946 had been a marketing specialist with the U. S. Department of Agriculture and was assistant manager of Finer Foods Packaging Corporation. On the railroad he has worked as agricultural agent in Kansas City and as industrial agent at Oklahoma City. He took his present position at Dallas in 1955.

In addition to these specialists, the various Rock Island traffic representatives, freight agents, etc., in the many cities served by the lines stand ready to help you with site selection data and full information about the Rock Island's services.

All these men emphasize the point that all contacts and negotiations with industry are kept in the strictest confidence until such time that the industrialist concerned may be ready to make an announcement to the public.

As we stressed at the beginning of this report, our visit with the Rock Island industrial team proved to our complete satisfaction that here are men who know what they are doing, who really get a kick out of it, and who are set—anytime—to give you quickly and efficiently the specific assistance you need with plant location activities. They'll pick you up in a jeep or perhaps a helicopter, if the situation demands such, or go tramping with you across a meadow, to show you sites.

So, if you are considering a location anywhere in the U. S. heartland that the Rock Island serves, just give a tiny hint to any Rock Island man mentioned here or drop a line to the Industrial Development Department. You will — we guarantee — get some fast and constructive results.

The accompanying company survey was conducted by the editorial staff of I.D. under sponsorship of the Industrial Development Department of the Chicago, Rock Island and Pacific Railroad Company. Reprints of this study are available upon request from the Department which is located at the Rock Island's headquarters at LaSalle Station, Chicago 5, Illinois.



MANUFACTURERS RECORD

THE INTERNATIONAL SUMMARY OF PLANT LOCATION NEWS

ESTABLISHED 1882

VOLUME 129

NUMBER 9

By Donald V. Quinn

TAMPA, FLA. Contract for the construction of a new home office and manufacturing plant for Master Packaging, Incorporated, has been signed. The 20,000-square-foot plant, with equipment, will cost approximately \$500,000, according to Richard Turkel, general manager of the firm. The new facility will be built on a three-acre site. Additional space is available for planned expansion in the future.

Master Packaging manufactures polyethylene bags exclusively and distributes them throughout the Southeast. The building has been designed especially for the manufacturing of transparent bags.

MARSA, MALTA. Ramblers will be built by the end of the year in Malta, under an agreement just reached between American Motors Corporation and a Maltese firm, it was announced by William S. Pickett, director of automotive export. The firm, Rambler Automobile Assembly, Ltd., of Marsa, will assemble Ramblers for distribution in certain areas of Africa and the Middle East.

The plant, now under construction, will have an annual capacity of 6,000 cars, and provisions have been made for future expansion. The \$700,000 facility will have 110,000 square feet of factory floor space plus an administration building and a test track.

TUCKER, GA. Plans for the construction of a new \$750,000 manufacturing plant in the Montreal Industrial District of DeKalb County were announced by John G. Detwiler, president of Central Cable Corporation, Hersey Shore, Pennsylvania. The plant will manufacture a complete line of aluminum and copper conductors for sale to utilities and for other purposes.

Located on a 12-acre site, this is the first plant in the planned district, 10 miles northeast of Atlanta,

between the Lawrenceville Highway and LaVista Road. Construction of the first unit of the new industrial plant, a 34,000-square foot building is expected to be in operation by December 1960. This unit will serve the southeastern and southwestern part of the United States.

BUTLER, PENN. Executives of Armco Steel and Air Reduction officially placed on stream Airco's newest "on site" liquid air separation plant. It has a capacity of 120 tons of high purity oxygen per day and will supply this industrial gas by pipeline directly to the Butler Works of the Armco Steel Corporation. The \$multi-million electronically controlled facility, will also produce quantities of nitrogen and liquid argon.

BROOKLYN, N.Y. Sterling Transformer Corporation has recently completed a three-fold expansion of its plant area and production facilities by moving to a new plant. Located at 510 Driggs Avenue, it contains 18,000 square feet, in contrast to the 6,000 square feet it formerly occupied elsewhere. This was necessitated by the rapid growth in sales of transformers for military

and industrial equipment, according to Victor Gross, president.

The additional facilities will enable the handling of customer requirements faster and more efficiently while, at the same time, providing increased facilities for internal growth and product development.

HAGERSTOWN, MD. Negotiations have been completed for the site of a new \$multi-million plant to be built by Mack Trucks, Incorporated, it was announced here. The site extends over 274 acres of level ground near Route 11 and the new interstate highway Route 81, and has direct access to the Pennsylvania Railroad.

Mack truck plans to start work shortly on a series of one-story buildings on the site, which will have a total of approximately one million square feet of floor space. The plant will be finished in the fall of 1961, and at the outset will provide employment for about 2,000 persons.

The following is a summary of major industrial plants in the United States, Canada, and foreign countries, reported to INDUSTRIAL DEVELOPMENT during the month of June, 1960, by industries and industrial development organizations.

Number of employees is indicated by the code: A(Under 25); B(25-100); C(100-250); D(250-1,000); and E(over 1,000).

ALABAMA

Birmingham — Barber Pure Milk Co.; Ice cream. Plans announced. \$1 million.

Decatur — Electric Auto-Lite Co.; James P. Falvey, Chmn. of the Bd. Highway 20 and Nebo Lane. Regulators, distributors, solenoid switches, relays, governors, and condensers. Est. date of Oper., Early, 1961. 250,000 Sq. Ft. \$Multi-million. 80-acre site. (D)

NEW PLANTS

Greenville — Acme Industries, Inc.; K. A. Weatherwax, Pres. Air conditioning and refrigeration equipment. Plans announced. 50-acre site. 125,000 Sq. Ft. \$700,000. (C)

Irondale — Transall, Inc.; Richard C. Hassinger, Pres. & Owner. Conveyor equipment. Est. date of Oper., Fall, 1960. \$500,000.

ALASKA

No Plants Reported.

ARIZONA

No Plants Reported.

ARKANSAS

Augusta — Phillips-Van Heusen Corp.; Shirts and men's wear. Est. date of Oper., March, 1961. 24,000 Sq. Ft. (C)

Des Arc — Phillips-Van Heusen Corp.; Shirts and men's wear. Est. date of Oper., Jan., 1961. \$200,000. 40,000 Sq. Ft. (D)

Hot Springs — National Rejectors, Inc.; (Subs. of Universal Match Corp.; Vending machines and parts for coin-operated machines. Under Constr. \$2.5 million. 40-acre site. (D)

Little Rock — Titan II ICBM Missile Base; Launching pads. Plans announced. \$80 million. (E)

CALIFORNIA

Buena Park — The Kansas City Container Co.; Harold R. Freemon, Pres. Corrugated Shipping containers. Under Constr. \$2.5 million. 100,000 Sq. Ft. 11-acre site. (C)

Hanford — Armstrong Rubber Co.; Eleventh Ave. Tires. Under Constr. \$25 million. 320-acre site. (E)

San Jose — United Centrifugal Pumps; Harry Booth, Pres. 1132 North Seventh St. Petroleum, pipeline, chemical and power pumps. Plans announced. 6-acre site. (C)

COLORADO

Denver — The Canada Dry Bottling Co.; So. Zuni St. and Amherst Ave. Under Constr. Est. date of Oper., Oct., 1960. 40,000 Sq. Ft. \$500,000. 2½-acre site. (B)

Denver — Colorado Pump & Supply Co.; J. L. Manning, Pres. 560 So. Lipan St. Pumps, machinery and industrial supplies for industrial and agricultural use. In Oper. 28,000-Sq. Ft. site. 12,000-Sq. Ft. Bldg.

Denver — John Deere Co.; East 44th Ave. & Kearney St. Parts distribution. Under Constr. Est. date of Oper., Spring, 1961. \$600,000. 81,000 Sq. Ft. (B)

Denver — Timpte Bros, Inc.; 5900 North Washington St. Truck bodies and trailers. Under Constr. Est. date of Oper., Spring, 1961. 127,000 Sq. Ft. 20-acre site. \$1.5 million. (D)

CONNECTICUT

Clinton — Universal Wire Co.; (Subs. of Bostitch Mfg. Co.) Emmett Gardner, Pres. Wire staples. Plans announced. \$Multi-million. 50-acre site. 100,000 to 120,000 Sq. Ft. (B)

Monroe — Vitramon Inc.; Barton L. Weller, Pres. Capacitors. In Oper. 50,000 Sq. Ft.

Norwalk — Howe Folding Furniture Inc.; Folding tables. Under Constr. 28,000 Sq. Ft. \$420,000.

Waterbury — American Brass Co.; Research center. Plans announced. 50,000 Sq. Ft. \$1.5 million.

Windsor Locks — C. H. Dexter & Sons, Inc.; David L. Coffin, Pres. Paper specialties. Plans announced. 36,000 Sq. Ft. \$1 million.

DELAWARE

Delaware City — Collier Carbon & Chemical Co.; Naphthalene. Plans announced. 10-acre site. \$Multi-million.

Wilmington — Bestwall-Gypsum Co.; Wilmington Marine Terminal. Wallboard and similar products. In Oper. 25-acre site. \$7 million. (C)

Wilmington — Transit Freeze Corporation; Wilmington Marine Terminal. Frozen foods. Est. date of Oper., Sept., 1960. 30,000 Sq. Ft. \$1 million. (B)

DISTRICT OF COLUMBIA

No Plants Reported.

FLORIDA

Dania — Creative Crafts Co., Inc.; Chas. W. Herdman, Pres. Plastic radio cabinets and other plastic products including bicycle handle grips. Est. date of Oper., Sept., 1960. 2-acre site. (B)

Deland — A. H. Fischer Inc.; Alfred Fischer, Pres. Electrical transformers, coils and components parts. In Oper. (D)

Ft. Myers — American Level Co.; Robert Garland, Offl. Canal St. Shockproof construction levels. Est. date of Oper., Late 1960. (B)

Miami — Laura Lee Candies, Inc.; Joseph Altschuller, Pres. Candy. In Oper. (B)

Miami — Sovereign Resources Inc.; C. Marshall Wood, Pres. Steel. Est. date of Oper., Apr., 1961. \$4 million.

Miami — Wickly, Inc.; Mildred S. Reilly, Pres. Women's dresses. Est. date of Oper., Sept., 1960. (B)

Orlando — Todd Co.; (Div. of Burroughs Corp.) J. Hughes, Offl. Printed protective checks for banking trade. In Oper. (B)

Tampa — Master Packaging, Inc.; Richard Turkel, Gen. Mgr. S. Manhattan and Interbay Blvd. Polyethylene bags. Plans announced. 20,000 Sq. Ft. \$1.25 million. 3-acre site.

West Palm Beach — Lewis Historical Publishing Co., Inc.; Bruce M. Lewis, Pres. Publishing. In Oper. (B)

GEORGIA

Broxton — Broxton Mfg. Co.; Women's sportswear. Plans announced. (B)

Canton — Isaac Galanti; Furniture. Under Constr. 20,000 Sq. Ft. (B)

Decatur — Central Cable Corp.; Wire and cable products. Plans announced. \$750,000.

Newnan — Newnan Mills, Inc.; Cotton fabrics. Plans announced. (B)

Plainville — Trend Mills, Inc.; Rug mill. Under Constr. (B)

Tallapoosa — Stoffell Seals Corp.; Paper products. Under Constr. \$315,000.

THE TOP TEN

On the basis of the number of significant new plants reported in INDUSTRIAL DEVELOPMENT during the six month period ended July, 1960, here are the leading states in industrial expansion and the number of plants reported for each:

1. FLORIDA	102
2. OHIO	(Tied)
3. TEXAS	
4. PENNSYLVANIA	71
5. CALIFORNIA	51
6. ILLINOIS	49
7. MISSISSIPPI	46
8. MASSACHUSETTS	42
9. PUERTO RICO	40
10. NORTH CAROLINA	39

Tifton — McLeod's Fertilizers; Fertilizer. In Oper. 26,000 Sq. Ft. 3-acre site.

Tucker — Central Cable Corp.; John G. Detwiler, Pres. Aluminum and copper conductors. Est. date of Oper., Dec., 1960. 34,000 Sq. Ft. 12-acre site. \$750,000.

HAWAII

Honolulu — Island Lumber Co., Ltd.; James Campbell Ind. Park. Building supplies. Under Constr. 2.4-acre site. 20,000 Sq. Ft.

Honolulu — Plastic Products Co., Ltd.; James Campbell Ind. Park. Hot-cold plastic cups. Plans announced. 2½-acre site. 10,000 Sq. Ft.

IDAHO

Arco — National Reactor Testing Station; Engineering test reactor. Plans announced. \$24 million.

Blackfoot — American Linen Co.; Laundry Service. Under Constr. (B)

Boise — Grafe-Weeks; Piping for missile complexes. Also pipe cleaning. Under Constr. 5-acre site. \$250,000. (B)

Burley — Great Atlantic & Pacific Tea Co.; (National Produce Div.) Fresh pack potatoes and freezing for french-fries. Plans announced. 39,600 Sq. Ft. (C)

Twin Falls — U.S. Dept. of Agriculture; Soil and moisture laboratory. Plans announced. \$250,000.

ILLINOIS

Bedford Park — Bethlehem Steel Co.; Steel reinforcing bars and joists. Plans announced. 65,000 Sq. Ft.

Chicago — Breuer Electric Manufacturing Co.; 1810 W. Greenleaf Ave. Industrial and commercial vacuum cleaners and scrubbing machines. In Oper. 17,000 Sq. Ft.

Chicago — R. R. Donnelley & Sons Co.; 350 E. Cermak Rd. Commercial printing. Plans announced. 80,000 Sq. Ft.

Chicago — Durable Rubber Products Co.; 1907 N. Mendell St. Rubber sponge mats, stool cushions, etc. In Oper. 40,000 Sq. Ft.

Chicago — Harold Studios, Inc.; 371 W. Ontario St. Sculpture products. In Oper. 38,000 Sq. Ft.

Chicago — Kraco, Inc.; 362 West 38th St. Plastic insulation material. In Oper. 14,000 Sq. Ft.

Forest View — Owens-Illinois Glass Co.; 5000 Major Ave. Semi-rigid plastic bottles for packaging liquid detergents and other household products. In Oper. 66,000 Sq. Ft. (D)

Gurnee — Hoerner Boxes, Inc.; R. N. Hoerner, Pres. & Chmn. of the Bd. Corrugated boxes. Plans announced. 15-acre site. \$2.5 million. 180,000 Sq. Ft. (C)

Highland Park — Aluminum Mills, Inc.; 1660 Deerfield Rd. Aluminum coil sheet material. In Oper. 15,000 Sq. Ft.

Lyons — Arrow Gear Co.; Spiral, bevel and instrument gears. Plans announced. 15,000 Sq. Ft.

Momence — Agar Packing Co.; Donald Cameron Pers. Mgr. Hog processing. Plans announced. \$1.5 million. 5-acre site. (D)

Niles — Republic Molding Corp.; Polyethylene housewares. Plans announced. 10-acre site. 200,000 Sq. Ft.

Park Forest — Hollymatic Corp.; Food proportioning machinery. Est. date of Oper., Fall, 1961. 6-acre site. 70,000 Sq. Ft. (C)

Rolling Meadows — Polymer Corp.; Plastic coating of metals. Under Constr. 17,000 Sq. Ft.

NEW PLANTS

Schiller Park — Atole Tool and Mold Corp.; Dies and plastic molds. Plans announced. 32,000 Sq. Ft.

Wheeling — Tower Packaging Co.; Print transparent materials for wrapping and packaging. Under Constr. 18,000 Sq. Ft.

INDIANA

Gary — Kaiser Aluminum & Chemical Corp.; 5th and Cline. Petroleum coke processing. Under Constr. Est. date of Oper., Jan., 1961. \$1 million.

Hammond — LaSalle Steel Company; 1412 — 150th St. Cold finished steel bars. Under Constr. 10,000 Sq. Ft.

IOWA

Albia — Trophy Glove Co.; Richard Coon, Mgr. Gloves for hunting and sports activities. In Oper. (B)

Elkader — Elkader Plastics Co.; Plastic bottles, planters, pots, wire racks, stands, peg board, hooks, etc. In Oper. (B)

KANSAS

Galena — Kenfern Industries; Kenneth Jones, Owner. Vending machines. Est. date of Oper., Midsummer, 1960. (B)

KENTUCKY

Lebanon — Linda Sportswear, Inc.; Women's blouses. In Oper. (C)

Louisville — General Electric Co.; Bishop's Lane. Electric appliances. Est. date of Oper., March, 1961. 8-acre site. \$800,000. 1½-acre bldg. (B)

South Shore — Hooker Chemical Corp.; Thomas E. Moffitt, Pres. Synthetic phenol. Est. date of Oper., End, 1961. 165-acre site. \$Multi-million.

LOUISIANA

No Plants Reported.

MAINE

Hampden — L. B. Evans' Son Co.; Harvey B. Evans, Pres. Mens slippers and casual shoes. Est. date of Oper., Fall, 1960. 10,000 Sq. Ft. (B)

Limerick — Limerick Mfg. Co.; Fabricated footwear components. Est. date of Oper., Sept., 1960. 10,000 Sq. Ft. (B)

MARYLAND

Baltimore — Rutledge Manufacturing Co.; E. Freidberger, Mgr. 410 Lombard Street. Pajamas. In Oper. 75,000 Sq. Ft.

Baltimore — United States Gypsum Co.; G. J. Morgan, Pres. Gypsum board. Plans announced. 46-acre site. (C)

Cockeysville — Noxzema Chemical Co.; George Lloyd Bunting, Pres. Medicated skin creams. Under Constr. Est. date of Oper., Feb., 1961. 65-acre site. 86,000 Sq. Ft.

Dindalk — Owens Yacht Company, Inc.; Charles J. Owens, Pres. 1300 West North Ave. Boats and yachts. In Oper. 25,000 Sq. Ft.

Ferndale — C. M. Kemp Mfg. Co., Inc.; W. Kemp Lehman, Pres. Industrial process heating equipment. Plans announced. 7-acre site. 39,000 Sq. Ft. (B)

Trucks. Est. date of Oper., Fall, 1961. 1 million Sq. Ft. 274-acre site. (E)

Hagerstown — Mack Trucks, Inc.; Trucks. Est. date of Oper., Fall, 1961. 1 million Sq. Ft. 274-acre site. (E)

Halethorpe — Maryland Paper Box Co.; Maurice Mahr, Pres. Canco Rd. Folding paper Boxes. In Oper. 36,000 Sq. Ft.

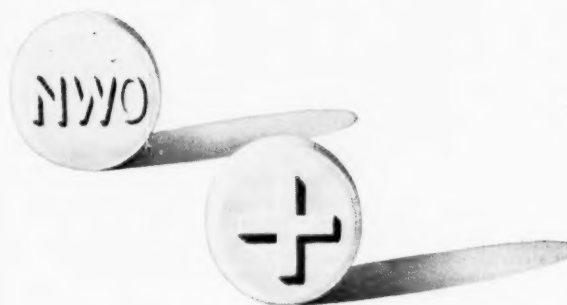
MASSACHUSETTS

Agawam — Standard Wood Products, Inc.; James J. Mercadante, Pres. Furniture frames. Est. date of Oper., Sept., 1960. 15,000 Sq. Ft. (B)

Baldwinville — Temple-Stuart Co.; Furniture. Est. date of Oper., Sept., 1960. 35,000 Sq. Ft. (D)

Chicopee Falls — National Dairy Co.; (Sealtest Foods Div.) Milk. Est. date of Oper., Nov. 1960. 10,000 Sq. Ft. (B)

East Longmeadow — Sunshine Art Studios, Inc.; Greeting cards. Plans announced. 200,000 Sq. Ft. 27-acre site. (D)



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THE TOLEDO EDISON CO.

NEW PLANTS

Holborrk — Farina Brothers Co.; S. Paul Farina, Pres. Custom Kitchens. Est. date of Oper., Sept., 1960. 15,000 Sq. Ft. (C)
Springfield — Industrial Properties, Inc.; S. Crossman, Pres. Lumber products. Plans announced. \$250,000. (B)

MICHIGAN

Benton Harbor — Lakeland Container Corp.; J. L. Weaver, Pres. Containers. Under Constr. \$500,000.
Capac — Dryden Mfg. Co.; John Schwab, Gen. Mgr. Auto stampings and assemblies. Under Constr. (B)
Cass City — General Insulated Wire Works, Inc.; (Subs. of General Cable Corp.) James R. McDonald, Pres. Insulated wire. Under Constr. \$300,000.
Coldwater — Kroger Corp.; Jay and Darling Sts. Egg grading. Plans announced. 5-acre site. 32,400 Sq. Ft. (C)
Coloma — American Can Company; (Canco Div.) Metal containers. Under Constr. Est. date of Oper., Sept., 1960. 60,000 Sq. Ft.
Detroit — Metalcraft Co.; D. F. Dunna-beck, Pres. Metal products. Under Construction. (B)
Dundee — Dundee Cement Co.; Dr. Hans Gygi, Pres. Cement. In Oper. \$25 million.
Grand Rapids — Light Metals Corp.; J. G. Van Dyke, Pres. Metal products. Plans announced. 15-acre site. (C)
Kalamazoo — General Gas Light Co.; G. A. Humphrey, Pres. Pneumatic Valves and devices. In Oper. (C)
Lansing — Seven Up Bottling Co. of Central Michigan, Inc.; soft drinks. Plans announced. (B)
Lapeer — Lapeer Metal Products Co.; Div. of Garland Mfg. Co.) Leonard Mooil, Gen. Mgr. Metal products. Under Constr. (C)
Manistee — Century Boat Co.; F. L. Hewitt, Jr., Pres. Boats. Plans announced. \$750,000. (D)

MINNESOTA

Minneapolis — Control Data Corp.; Wm. C. Norris, Pres. Electronic computers. Plans announced. \$1.8 million.

MISSISSIPPI

Aberdeen — American Potash & Chemical Corp.; Peter Colefax, Pres. Electrolytic manganese metal. Est. date of Constr., Fall, 1960. Est. date of Oper., Late 1961. 1,600-acre site. \$5 million.
Bassfield — Ellisville Hosiery Mill, Inc.; Hosiery. In Oper. (B)
Bay St. Louis — Gourmet Seafoods, Inc.; Food. In Oper. (B)
Booneville — American Seating Co.; F. C. Van Brundt, V. Pres. & Gen. Mgr. Wooden church furniture. Est. date of Oper., Spring, 1961. \$1.6 million. 50-acre site. 150,000 Sq. Ft. (D)
Columbia — Bond Supply Co.; Concrete. In Oper. \$300,000. (B)
Foxworth — Mississippi Pulp & Paper Corp.; Pulp and paper. In Oper. (C)
Greenville — Borg-Warner Corp.; (Atkins Div.) Saws. Est. date of Oper., Late 1960. 292,000 Sq. Ft. \$2 million. (D)
Magnolia — Hankins Container Corp.; Paper containers. Est. date of Oper., Late 1960. 105,000 Sq. Ft. (C)
Okolona — Delmeade Slacks; (Subs. of Delta Trousers of Okolona) Women's slacks. In Oper. (B)
Rienzi — Lifeline Co.; Plastic swimming pool accessories. Est. date of Oper., 1960. \$200,000. (C)
Surrell — Movie Star, Inc.; Apparel. In Oper. (B)

MISSOURI

Bernie — Brown Shoe Co.; Shoes. Plans announced. 60,000 Sq. Ft. (D)
Hazelwood — Crown Zellerbach Corp.; Flexible packaging products. Est. date of Oper., Mid-1961. 245,000 Sq. Ft. \$2 million. 27-acre site. (D)
Kansas City — Rupard Asphalt Co.; Hot mix asphalt. Plans announced. \$250,000.
St. Louis — ACF Industries, Inc.; (Carter Carburetor Div.) Research Laboratory. Plans announced. 40,000 Sq. Ft.
St. Louis — American Olean Tile Co.; 8660 Olive Street Rd. Tile. In Oper. 12,300 Sq. Ft.
Verona — Hoffman-Taff, Inc.; Walter H. Hoffman, Pres. Vitamins. Est. date of Oper., Sept., 1960. 20,000 Sq. Ft. 90-acre site.
Washington — Ernest Hazel Jr., Inc.; Vinyl products. Plans announced. 17,500 Sq. Ft. (B)

MONTANA

No Plants Reported.

NEBRASKA

No Plants Reported.

NEVADA

Caliente — Electro-Nuclear Metals, Inc.; Zirconium, hafnium and titanium metals. Under Constr. Est. date of Oper., Nov., 1960. \$1 million. 120-acre site.

NEW HAMPSHIRE

No Plants Reported.

NEW JERSEY

Parsippany — Texas U.S. Chemical Co.; Dr. Bernard C. Barton, Dir. of Research. Littleton Rd. Butadiene and synthetic rubber. Under Constr. 53,000 Sq. Ft. 25-acre site.

NEW MEXICO

Deming — Cork Development Corp.; Richard E. Steinbrecher, Pres. Cork insulation, cork tile and other cork products. In Oper. 18,000 Sq. Ft.

NEW YORK

Brooklyn — Sterling Transformer Corp.; Victor Gross, Pres. 510 Driggs Ave. Transformers for military and industrial equipment. In Oper. 18,000 Sq. Ft.
Chili — Bausch and Lomb Co.; Eyeglass frames. In Oper. \$4 million. (D)
Fort Edward — General Electric Company; Aluminum foil. Under Constr. 20,000 Sq. Ft. \$2 million. (B)
Grand Island — Taylor Devices, Inc.; Paul H. Taylor, Pres.-Treas. Whitehaven Rd. Liquid springs. Plans announced. \$370,000.
Honeoye — Di-Noc Chemical Arts; Photographic products. Under Constr. Est. date of Oper., Jan., 1961. \$1 million. 60,000 Sq. Ft. 5-acre site.
Jamaica — Industrial Plywood Co. Inc.; Intergraded plywood. Plans announced. 100,000 Sq. Ft.
Long Island City — Polarad Electronics Corp.; Paul Odessey, Exec. V. Pres. Queens Blvd. & 34th St. Microwave electronic instruments. In Oper. 100,000 Sq. Ft.
Syosset — Columbia Corrugated Container Co.; Corrugated containers. Plans announced. 200,000 Sq. Ft. \$1 million.

NORTH CAROLINA

Fayetteville — Ideal Cement Co.; Cement. Est. date of Constr., Late, 1960. \$Multi-million.
High Point — Montgomery Paper Box Co.; S. Rosinsky, Owner. 511 Mangum St. Paper Boxes. In Oper. 25,000 Sq. Ft. \$220,000. (B)
Pembroke — Carolina Sportswear Co.; Sportswear. Plans announced. (C)

NORTH DAKOTA

No Plants Reported.

OHIO

Akron — Carlson Mfg. Co.; 1277 Home Ave. Sheet metal. Est. date of Oper., Sept. 1960. 24,000 Sq. Ft.
Canton — Timken Roller Bearing Co.; W. R. Timken, Pres. 1835 Dueber Ave. S.W. Tapered roller bearings high alloy steel, rock bits. Under Constr. 58,000 Sq. Ft. \$4.5 million.
Cincinnati — B. F. Goodrich Co.; Claude Holmes, Dist. Mgr. 3844 Spring Grove Ave. Retreading tires. Est. date of Oper., Nov., 1960. 32,375 Sq. Ft. \$250,000. (B)
Cincinnati — Nolte Screw Machine Products Co.; Harold Coster, Pres. 1536 Freeman Ave. Screw machine products. Plans announced. 12,000 Sq. Ft. (A)
Cincinnati — United States Drill Head Co.; A. P. Speckin, Pres. 5298 River Rd. Multiple spindle drilling, tapping, boring and milling heads. Est. date of Oper., Sept., 1960. 29,000 Sq. Ft. \$400,000. (C)
Cleveland — American-Marietta Co.; Kenneth E. Clarke, Pres. 12815 Elmwood Ave. Paints and laxquers. Est. date of Oper., Sept., 1960. 17,000 Sq. Ft. (C)
Cleveland — Hi-Voltage Equipment Co.; J. W. Rittenhouse, Tech. Dir. 4000 E. 116th Street. Disconnect switches and other equipment for high power control on long distance transmission lines. Plans announced. \$750,000. 110,000 Sq. Ft.
Cleveland — Scott and Fetzer Co.; George H. Scott, Pres. 1920 W. 114th St. Vacuum cleaners. Plans announced. \$330,000. 55,000 Sq. Ft.
Toledo — Sun Oil Co.; W. T. Askew, V. Pres. High-grade naphthalene. Plans announced. \$8 million.

OKLAHOMA

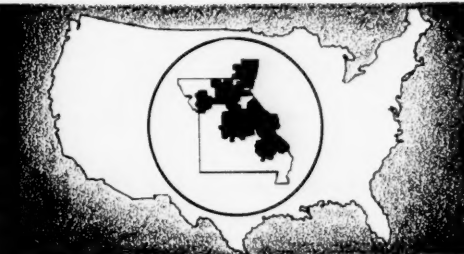
Ardmore — Black, Sivalls & Bryson; Kenneth W. Lineberry, Pres. Poxyglass tanks — oil field equipment. Est. date of Oper., Sept., 1960. \$200,000. (D)
Muskogee — Fairacres Food Corp.; Don Frazier, Pres. Bakery products. In Oper. 25,000 Sq. Ft. (B)
Tulsa — Buster Brown Textiles, Inc.; Henry F. Buttery, Mgr. Children's clothing. Under Constr. Est. date of Oper., Sept., 1960. 35,000 Sq. Ft. (B)
Tulsa — Mobile Engineering Co.; Eugene Gubser, V. Pres. Mobile homes. In Oper. 24,000 Sq. Ft. (B)

OREGON

Grants Pass — Rogue Valley Rubber Co.; Plywood glue spreader rollers. In Oper. (B)
Longview — United Pacific Aluminum Corp.; Baked enamel unpainted aluminum coil stock and enameled aluminum venetian blinds. Est. date of Constr. Late summer, 1960. Est. date of Oper., Late 1961. \$Multi-million. 300-acre site. (D)
Medford — Medford Corp.; Plywood. Plans announced. (D)
Ontario — Malheur Mobile Homes, Inc.; James Dobbins, Gen. Mgr. 22 S. E. 4th Ave. House trailers. In Oper. (B)
Portland — Bede-Hibbitt, Inc.; 18 S.W. Boundary Court. Printing. Under Constr. 15,000 Sq. Ft.
Portland — Code-A-Phone Electronics, Inc.; 8136 S.W. Beaverton & Hillsdale Hwy. Electronic telephone answering & recording systems. In Oper. (B)
Portland — General Motors Corp.; (Euclid Div.) N.E. Columbia Blvd. & 87th Ave. Parts for vehicles. Under Constr. 20,000 Sq. Ft.

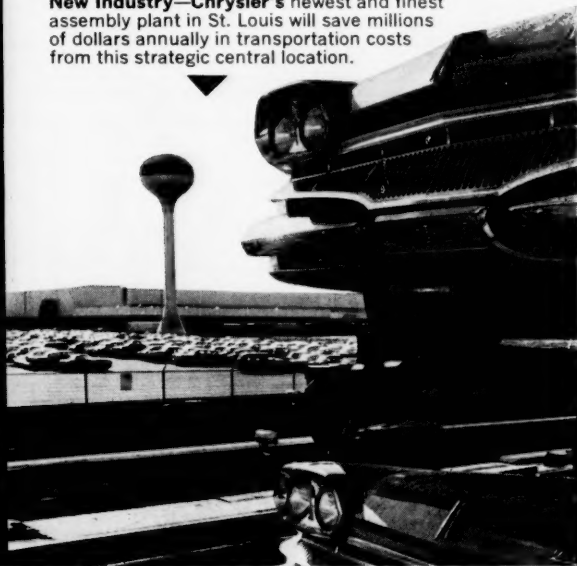
(Continued on page 74)

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NEW PLANTS

(Continued from page 72)

PENNSYLVANIA

Butler — Air Reduction Co., Inc.; John A. Hill, Pres. Liquid air separation, nitrogen and liquid argon. In Oper. \$Multi-million. (B)

Dillsburg — Alfred Allen Watts Co.; Harrisburg-Gettysburg Rd. Specialized printing of business forms. Est. date of Oper., Oct., 1960. 6-acre site. 15,000 Sq. Ft. \$400,000. (B)

East Butler — Magnetics, Inc.; Electronic components. Plans announced. 22,000 Sq. Ft. \$400,000. (D)

Ebensburg — Jo Ann Dress Mfg. Co.; Women's dresses. Plans announced. (B)

Erie — Coyne Industrial Laundry, Inc.; Supply service. Plans announced. 20,618 Sq. Ft. \$225,000. (A)

Flemington — Union Steel Co.; John Dietrich, Pres. Extruded rods and pipe. Plans announced. 41-acre site. (C)

Kittanning — West Penn Power Co.; Power generating plant. In Oper. 30-acre site. \$46 million.

McKeesport — Builders Supply Co.; Builders supplies. Est. date of Oper., Aug., 1960. (B)

Marcus Hook — Sun Oil Co.; Propylene. In Oper. \$2 million.

Mt. Pleasant — Permal, Inc.; Laminated plastics. In Oper. \$500,000. (B)

Perryopolis — Diana Sportswear Mfg. Inc.; Perryopolis, Penna. Plans announced. (B)

Philadelphia — GSM, Inc.; Samuel Rosenberg, Pres. Remanufactured engines. In Oper. 30,000 Sq. Ft. \$1 million.

Philadelphia — Gegy Chemical Corp.; Orthodox and Large Sts. Dyestuff. Plans announced. 16,000-Sq. Ft. Bldg. 45,000-Sq. Ft. site.

Philadelphia — Howard Refrigerator Co.; Albert Fogel, Pres. Blue Grass Rd. and Grant Ave. Commercial and industrial refrigeration. Plans announced. 100,000 Sq. Ft. 6-acre site. (D)

Pittsburgh — Norbatrol Electronics Corp.; Electronic assemblies. In Oper. (B)

Williamsport — Vidmar, Inc.; Storage cabinets. Plans announced. 38,400 Sq. Ft. \$250,000. (B)

PUERTO RICO

No Plants Reported.

RHODE ISLAND

No Plants Reported.

SOUTH CAROLINA

Marion — Marion Industries, Inc.; (Subs. of Draper Corp.) John W. Hutchinson, Works Mgr. Wood and metal products. Plans announced. 50,000 Sq. Ft. (C)

SOUTH DAKOTA

No Plants Reported.

TENNESSEE

Brownsville — Tennessee Pre-Cast Corp.; Dr. T. C. Chapman, Chmn. of the Bd. U.S. Hwy 70. Pre-cast tile terrazzo and cast stone products. Plans announced. \$350,000. (B)

Chattanooga — Nopco Chemical Co.; George G. Stier, Pres. Polyether urethane foam. Plans announced. 100,000 Sq. Ft. 20-acre site. (B)

Covington — General Curtain Co.; David and Herman Getson, Mgrs. Plans announced. 30,000 Sq. Ft. (D)

Gray Station — American Chemical Corp.; Dr. Eugene Kronisch, Offl. Chemical processing. Plans announced. 15-acre site. (C)

Hendersonville — Jones Lumber Co.; Pre-cut and package lumber. Under Constr. \$250,000. (B)

Knoxville — Corr-Met-Co., Inc.; Julian Link, Mgr. Corrugated pipe. Under Constr. 10,000 Sq. Ft.

Memphis — Diversified Plastics, Inc.; Plastic pipe. Under Constr. 40,000 Sq. Ft. \$300,000. (B)

Moscow — Troxel Co.; Bicycle seats. Plans announced. \$500,000. (D)

TEXAS

Bon Wier — Trans-Atlantic Mfg. Co.; James Sprouse, Owner. Heating, cooling, ventilating, and electronic equipment. Under Constr. 14-acre site. (B)

Carrollton — Allied Battery Co.; K. W. Pickering, Pres. Batteries. Est. date of Oper., early, 1961. 100,000 Sq. Ft. \$1 million. 40-acre site. (C)

Colorado City — Fuller, Les, Mfg. Co.; Truck and pick-up air conditioners. In Oper. 14,000 Sq. Ft.

Dallas — Campbell Mfg. Co., Inc.; Hugh P. Campbell, Pres. 9106 Chancellor Row. Boat tops, upholstered boat seats, boat covers etc. In Oper. 15,000 Sq. Ft.

El Paso — Union Mfg. Co.; Octavia and Mills Sts. Men's and boys' trousers and work clothes. Plans announced. 40,000 Sq. Ft. \$325,000. 2-acre site.

Everman — Regold Manufacturing Co.; Trammell Street. Millwork items. In Oper. 28,700 Sq. Ft. (B)

Fort Worth — Fort Worth Block Company, Inc.; M. A. McDonnell, Pres. Lightweight building block. Est. date of Oper., Fall, 1960. Under Constr. 18-acre site. 22,910 Sq. Ft.

(Continued on page 76)

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MANUFACTURERS RECORD

(IN REVIEW)



"What Enriches Any Region
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AUGUST 1886

(AS ABSTRACTED MORE THAN 70 YEARS LATER)

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Reference Book Issued

This reference book of the Norfolk & Western Railroad Co., just issued, is a handsome little volume of over 90 pages containing numerous illustrations. The book is a complete guide for travelers on the Norfolk & Western system, and briefly mentions every station on the line, giving short descriptions of almost all of them. The illustrations are well executed. Among them are views of Norfolk & Western's terminal at Lambert's Point, general offices of the company, Hotel Roanoke, Crozier Iron Co.'s plant, the Natural Bridge, the Buena Vista furnace, Graham Inn, the projected depot at Bristol, Va.-Tenn., and about seventy other interesting views. In the front part of the book is a very excellent map of Virginia and West Virginia and portions of bordering states reached by the Norfolk & Western. Copies of this volume can be secured upon application to officers of the Company at Roanoke or Philadelphia.

Location Inducement

The London & New York Land Co., of Jellico, Tenn., offer to give to a reliable party or company who will erect a furniture factory, hub and wheel factory or wagon factory employing a large number of skilled mechanics, twenty-five acres of good land situated in the most desirable portion of the town. This land is said to be worth \$10,000. The company will also give monetary inducement and sufficient land to good, reliable men who wish to establish manufactories of any kind. Fuel

and steam can be had at a minimum cost, and water-power can soon be secured. Jellico is situated in a region where lumber of all kinds is found in abundance. The East Tennessee, Virginia & Georgia and Louisville & Nashville form a junction here giving magnificent railroad facilities.

Hagerstown Booms

Hagerstown is the magic city of Maryland, where money grows more rapidly than in any other city of the state.

The Hagerstown Manufacturing, Mining & Land Improvement Co. controls 1,000 acres of land in and adjoining the city limits, which it is developing rapidly by placing factories upon the same.

The city now contains 95 manufactories, 6 of which have been located through the efforts of this land company in the last 90 days, and will give employment to not less than 435 people.

Hagerstown possesses the most phenomenal advantages of any city in Maryland, outside of Baltimore, with her 6 railroads, her 64 passenger trains and 39 mails daily, her magnificent hotels, her solid streets, electric lights, free postal delivery and healthfulness, make it one of the most desirable places for either manufacturing, business or residence location to be found.

Real estate is cheaper in this city than any other place we know of with only half of her advantages. There are no fictitious values placed upon any of the

company's property, nor, in fact, upon any in the city. Manufacturers are finding out rapidly the extreme cheapness with which production can be maintained here, owing to the superior facilities offered of every character, and are weekly making application for sites (which are free to solid concerns) either personally or by letter.

The last establishment located here, on September 20, is a large silk mill from New York city.

Report of Bridge

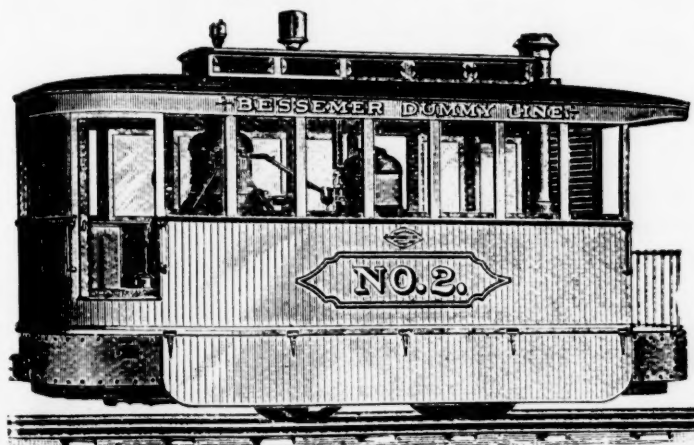
The report that an iron bridge was to be built over Spring creek, near Round Timber, Texas, was the basis of an inquiry for fuller particulars sent by the MANUFACTURERS RECORD to the postmaster at that point. And now comes this sarcastic reply:

"There is being built a little culvert across the Abel spring branch that a man can straddle. Won't amount to anything; is all gas."

Come come, Mr. Crabbs, don't get impatient. The MANUFACTURERS RECORD runs down every rumor of building and development in the South, and is, therefore, able to publish reliable and authentic reports each week. After we have investigated we print the true and omit the false. But if Mr. Crabbs has discovered a gas at Round Timber that will build a culvert, even one that a man can straddle, he would better hurry up and get out a patent. It would beat aluminum.

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NEW PLANTS

(Continued from page 74)

Houston — Air Reduction Co., Inc.; John A. Hill, Pres. Liquid oxygen, nitrogen, and argon. Plans announced. 20-acre site. \$1.5 million. (B)

Houston — Conco Chemical Co.; Lacy E. Crain, Pres. Detergents and degreasers. Est. date of Constr., Oct. or Nov., 1960. \$1 million. 25,000 Sq. Ft. (B)

Houston — General Electric Co.; Gerald C. Halon, Plant Mgr. 12th Ave. Tungsten carbide products. Plans announced. 1½-acre site. \$1 million. (B)

Houston — Nesco Steel Barrel Co.; (Subs. of United Steel Barrel Co.) Thomas N. Stinson, Pres. Federal Rd. Steel barrels and drums. Est. date of Constr., Summer, 1960. Est. date of Oper., End, 1960. \$500,000. 6-acre site. (C)

Houston — Rath Packing Co.; Joe Gibson, Pres. Mykawa Rd. and Donoho St. Meat processing. Under Constr. Est. date of Oper., 1961. \$1.25 million. (C)

Houston — Western Lithograph Co. of Texas, Inc.; (Subs. of Western Lithograph Co.) Otis E. Wells, Pres. 3482 W. 12th St. Lithographing. Under Constr. 16,000 Sq. Ft. \$250,000.

Nederland — Walling's Jersey Farm; S. E. Walling, Owner. Milk processing. Under Constr. Est. date of Oper., Early fall, 1960. \$300,000.

Orange — Big Three Welding Equipment Co.; Harry K. Smith, Pres. Liquid oxygen and liquid and gaseous nitrogen. Est. date of Oper., Jan., 1961. 5-acre site. \$1 million.

Port Arthur — Texaco, Inc.; Augustus C. Long, Chmn. Research center. Plans announced. 35.2-acre site. \$7.5 million.

Texarkana — Anglo Southern Paper Corp.; Pulp and paper. Under Constr. \$60 million.

Victoria — Power Cat Boat Co.; Ed Lampel, V. Pres. Fiberglass boats. Plans announced. 20,000 Sq. Ft.

UTAH

No Plants Reported.

VERMONT

No Plants Reported.

VIRGINIA

Alexandria — Aero Geo Astro Corp.; Kenneth S. Kelleher, Pres. Edsel and Lincoln Rds. Aircraft antenna systems, miniature satellite or missile transponders and command receivers for space instrumentation. Plans announced. 100,000 Sq. Ft.

Appalachia — Jefferson Manufacturing Co.; Boy's sportswear. In Oper. (B)

Boynton — Lake Sleepwear Co.; Pajamas. Under Constr. Est. date of Oper., Aug., 1960. (B)

Fieldale — Martin Processing Co.; Dyeing process. Plans announced. 32,000 Sq. Ft. (B)

Newport News — Hampton Hardwood Corp.; Interior moldings, door jams, furniture parts and other hardwood products. Plans announced. \$250,000. (B)

WASHINGTON

Hoquiam — Grays Harbor Paper Co.; (Div. of Rayonier, Inc.) George A. Holt, Res. Mgr. Paper. Under Constr. Est. date of Oper., 1961. 32,000 Sq. Ft. \$19 million.

Prosser — Prosser Packers, Inc.; Maloy Sensney, Pres. Frozen potato products. Est. date of Constr., Oct., 1960. 48,000 Sq. Ft. \$250,000. (D)

Seattle — Glaser Beverages; 351 Eliot Ave. Bottling plant. Under Constr. 70,000 Sq. Ft. \$1.25 million.

WEST VIRGINIA

Kenova — Novamont Corp.; (Subs. of Montecatini Co.) Dr. Carlo Vancini, Gen. Mgr. Plastics. Est. date of Oper., Early 1961. \$10 million. (C)

Moundsville — West Virginia Corrugated Container Co.; B. F. Pettengill, Pres. Packaging. In Oper. (B)

WISCONSIN

No Plants Reported.

WYOMING

No Plants Reported.

CANADA

ALBERTA

Calgary — Allied Chemical Services Ltd.; E. G. Law, Pres. 5507 First St., S.E. Agricultural Chemicals. In Oper. 2½-acre site. 10,500 Sq. Ft. (B)

Calgary — Barber Machinery Co., Ltd.; Earl Griffith, Pres. 4608 Macleod Trail. Aluminum street lighting poles and other metal fabricated items. Est. date of Oper., Fall, 1960. 3-acre site. 20,000 Sq. Ft. \$200,000.

Calgary — National Tank Co.; Tracy Smith, Pres. 616 — 58th Ave., S.E. Tanks and pressure vessels. Est. date of Oper., End, 1960. 5-acre site. 10,000 Sq. Ft. (B)

Camrose — Camrose Tubes Ltd.; Small diameter steel pipe. Est. date of Oper., Oct., 1960. \$3 million.

Edmonton — Dymor Plastics Ltd.; Plastic foam insulation. In Oper. \$400,000.

Edmonton — Tube-Kote Ltd.; Pipe coatings. Est. date of Oper., Est. 1960. \$300,000.

Medicine Hat — J. A. Wilson, Ltd.; Commercial fluorescent lighting fixtures. In Oper. \$300,000. (B)

BRITISH COLUMBIA

Delta — Flintkote Co. of Canada Ltd.; Vinyl and asphalt flooring tile. Plans announced. \$2 million. (C)

MANITOBA

St. James — Imperial Tobacco Co. Ltd.; George Street. Tobacco warehousing. Est. date of Oper., Early 1961. ½-acre site. \$600,000. (B)

Winnipeg — Labatt's Manitoba Brewery, Ltd.; Brewery products. Est. date of Oper., End 1960. 8-acre site. 50,000 Sq. Ft. \$500,000. (C)

NEW BRUNSWICK

NEWFOUNDLAND

NOVA SCOTIA

No Plants Reported.

I. D. CALENDAR — 1960

October 23-25

Southern Industrial Development Council, 1960 Convention, Sam Peck Hotel, Little Rock, Arkansas. Arrangements and entertainment features are being handled by Chief Host Everett Tucker, Industrial Development Company of Little Rock.

October 10-11

The 10th Annual Texas Industrial Development Conference, Memorial Student Center, College Station, Texas.

December 7-9

National Association of Manufacturers' 65th Annual Congress of American Industry, Waldorf Astoria Hotel, New York City, New York.

April 9-11, 1961

American Industrial Development Council, 36th Annual Conference, Sheraton-Dallas Hotel, Dallas, Texas.

ONTARIO

Etobicoke — Ringball Ltd.; 245 Dalesford Rd. Ball and roller bearings, pillow blocks, steel and bronze balls. In Oper. 3-acre site. 12,000 Sq. Ft.

Kitchener — Dominion Electrohome Industries Ltd.; A. C. Pollock, Pres. Bedroom and dinette suits, large high fidelity cabinets and electronic organs. In Oper. 55,000 Sq. Ft. (B)

Kitchener — Bernardo-Hill Tile Co., Ltd.; Ross Morrison, Pres. 647 Victoria St. North. Marble, terrazzo, glazed and asphalt tile, acoustical ceiling material. Est. date of Oper., Sept., 1960. 20,000 Sq. Ft.

North York — Vacuum Metallizing Ltd.; Carnforth Rd. Metallizing toys and novelties, trophies, costume jewelry, lamp parts, bottle caps, hardware, and a wide variety of materials such as steel, brass, aluminum, copper and moulded or vacuum-formed plastic parts. In Oper. 14,000 Sq. Ft. 2-acre site.

North York — Woodbridge Moulded Products Ltd.; Toto Rd. Plastic articles, wall coverings and tile, plastic packaging materials, and custom moulded goods. Under Constr. Est. date of Oper., Sept., 1960. 24,000 Sq. Ft. 5-acre site.

Richmond Hill — Supreme Steel and Engineering Co., Ltd.; (Subs. of Toronto Iron Works Ltd.) I. W. Biller, Gen. Mgr. 105 Industrial Rd. Long and short span joist and other structural steel. Under Constr. 20,000 Sq. Ft. (C)

Toronto — Bradshaw's Ltd.; (Subs. of Dow Chemical of Canada Ltd.) Hwy 400. Converts plastic films, paper and foils into packaging for consumer and industrial products. Plans announced. 48-acre site.

Toronto — Frito Company of Canada Ltd.; Stanfield Rd. Convenience foods. Under Constr. 10-acre site. (C)

Toronto — Hilkron Steel Works Canada Ltd.; 5815 Dixie Rd. Structural steel sections, stairs and other fabricated shapes. Under Constr. 6½-acre site. 15,000 Sq. Ft.

Toronto — Rex Motor Products Ltd.; 1995 Wilson Ave. Produce and rebuild automotive components such as water and fuel pumps, voltage regulators, generators and starters. In Oper. 34,000 Sq. Ft. 2½-acre site.

Toronto — Royal Crown Cola Ltd.; Sunrise Ave. Soft drink beverages. Under Constr. Est. date of Oper., Late Aug., 1960. 5-acre site. 45,000 Sq. Ft.

PRINCE EDWARD ISLAND

QUEBEC

No Plants Reported.

SASKATCHEWAN

Regina — Liquid Carbonic Canadian Corp. Ltd.; Oxygen, nitrogen, acetylene and dry ice. In Oper. 10,000 Sq. Ft. \$750,000.

Regina — Redi-Mix Ltd.; Concrete. In Oper. \$300,000.

FOREIGN

Australia — Imperial Chemical Industries; Pigments for plastics, paint, printing ink and allied products. Plans announced. \$3.4 million.

France — Bethune. Firestone Tire & Rubber Co.; Harvey S. Firestone, Jr., Chmn. Tires and tubes. Under Constr. Est. date of Oper., Late 1960. \$Multi-million. 81-acre site.

Ireland — Shannon. Standard Pressed Steel International Ltd.; Shannon Free Airport. Steel. Est. date of Oper., Oct., 1960. 50,000 Sq. Ft.

Malta — Marsa. Rambler Automobile Assembly, Ltd.; William S. Pickett, Dir. Car assembly. Est. date of Oper., End, 1960. \$700,000. 110,000 Sq. Ft.

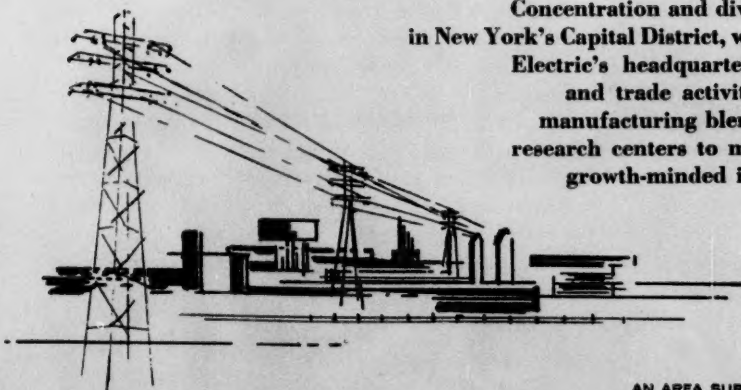
*Number 4 in a series about
industrial opportunity in . . .*

UPSTATE NEW YORK



THE CAPITAL DISTRICT

Concentration and diversity live side by side
in New York's Capital District, where General
Electric's headquarters, Albany's government
and trade activities, and Troy's mixed
manufacturing blend with tourism and major
research centers to make a favorable setting for
growth-minded industry.



AN AREA SURVEY BY



THE INTERNATIONAL GUIDE TO INDUSTRIAL PLANNING AND EXPANSION

Albany's State Street, climbing a steep hill up to the State Capitol, is one of America's most distinctive main streets. The Capitol is an opulent Victorian version of a French chateau, now overtopped by a skyscraper housing additional state offices.

Niagara Mohawk's Capital District, some 7,600 square miles of eastern New York centering on Albany, Schenectady and Troy, is in a commanding position within the Northeastern Manufacturing Belt. Excellent communications, ample water, resort-like climate and growing research facilities ensure a continued broadening of its already impressive economic base.

THE CAPITAL DISTRICT . . . HEART OF THE INDUSTRIAL NORTHEAST

By Frank H. Stedman

Columbus set a new style when he sailed westward to get to the Far East. But he did not reach China on any of his four voyages and died a disappointed man. More than a century later, the search for a short western passage to China was still going on when Henry Hudson and his Dutch shipmates in the Half Moon reached the site of Albany on the river that bears his name.

Like Columbus, he turned back disappointed — this was only a river after all and not a continuous strait across the whole of the inconvenient new continent barring the way westward. He sought elsewhere for his strait until he was cut adrift by his men in a vast subarctic bay that also bears his name.

What he had found in 1609, without realizing it, was of no small significance — the best natural passageway through the maze of Appalachian

ridges and peaks that extend almost continuously from Maine to Alabama. The Dutch soon returned to have another look and in 1614, six years before the Pilgrims came to Plymouth, they set up a trading post called Fort Nassau — the beginning of Albany.

The powerful and warlike Iroquois blocked the way westward, up the easy Mohawk Valley route leading directly to the great interior lowland surrounding the Great Lakes, but the canny Dutch managed to keep on good terms with the Iroquois and thus assured themselves a goodly share of all the furs taken in a vast area of North America.

Their rivals, the French in Quebec and Montreal, ran afoul of the Iroquois, who often prevented them from taking full advantage of the more direct route to the interior provided by the St. Lawrence.



THE CAPITAL DISTRICT

Between Albany and Montreal a relatively easy north-south route passes Lakes George and Champlain and the Richelieu River. This became a classic invasion route, and Ticonderoga, built by the French to control the passage between Lake George and Lake Champlain, became an American Gibraltar.

Although all the European wars of colonial times had repercussions in this area, the greatest action came during the Revolution. By the previous war the British had gained control of Canada and they had taken New York City in 1776. Their strategy for 1777 called for a three-pronged drive with their Iroquois allies — eastward down the Mohawk, southward past lakes Champlain and George and northward up the Hudson to meet at Albany and cut the colonies in two.

But the eastward drive was driven back, the northward drive never got under way and General Burgoyne made his way southward only to find himself isolated and harassed at every turn. His surrender in October at Saratoga was the first signal American victory; it convinced the French that the time was ripe to intervene on the American side.

Industry Started Early

After the Revolution the power of the Iroquois was broken and they faded from history, opening up central and western New York for rapid settlement. The frontier and fur-trading stage passed quickly from the scene. The state capital was moved to Albany from New York in 1797 and early in the next century construction began on the Erie Canal. Its completion in 1825 put Albany into competition with New Orleans as a market for Western grain.

Soon afterwards, railroads began pushing up both sides of the Hudson and Mohawk and fanning out to connect over the mountains to New England and northward to Montreal.

Textile mills sprang up around power sites in Troy, Cohoes and elsewhere in the area and the Government established an arsenal at Watervliet. Tanners brought down hemlock bark from the surrounding forests and leather goods, including gloves, were turned out in quantity.

Schenectady, an early center of locomotive construction, was for a long time a poor third to Albany and Troy, but it came into its own with the establishment of General Electric late in the last century. GE has become the industrial giant of the area, with 24,000 employed in Schenectady

alone, and the city passed Troy in 1920 to become second largest in the area.

In the process there has come into being a section of New York known as the Capital District. It corresponds rather closely with the Niagara Mohawk Power Corporation's service area of the same name, which consists of all or parts of 12 counties in east central and northeastern New York, and has an estimated 1960 population of about 910,000 and an area of 7,600 square miles.

The area extends from below the town of Hudson on the south to Westport on Lake Champlain in the north, and from the Vermont line in the east to St. Johnsville on the Mohawk to the west. Nearly all of it is in the Hudson-Mohawk drainage basin.

The Tri-City Metropolitan Area

The Capital District centers on three cities — Albany on the west bank of the Hudson, Troy on the east bank a little farther upstream and almost opposite the entrance of the Mohawk, and Schenectady, on the Mohawk 15 miles northwest of the other two.

Although each of the three largest cities still has a strong individuality, and although they have not grown completely together like Minneapolis and St. Paul, they are very closely linked and have long been recognized as constituting a single metropolitan area. The preliminary figures of the 1960 Census for the four counties, Albany, Rensselaer, Saratoga, and Schenectady, indicate a metropolitan area population of 649,942, a healthy gain of 10 per cent over the 1950 total of 589,359.

As such they form the largest tri-nuclear metropolitan area in the country, the nearest rival being Allentown-Bethlehem-Easton, Pennsylvania.

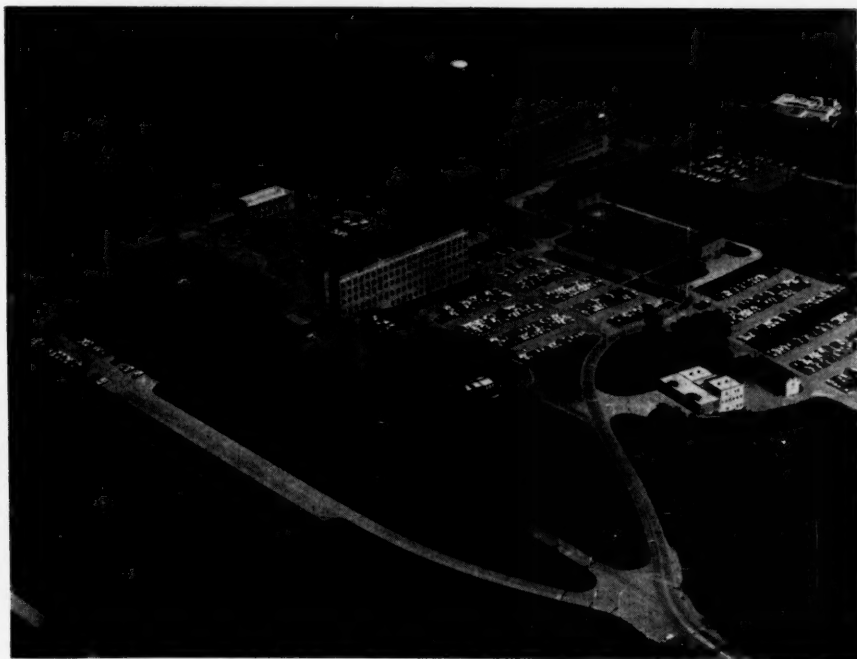
The metropolitan area is outranked only by New York and Buffalo among the Empire State's leading population centers, and also ranks third in wholesale and retail sales.

More than half of the metropolitan population is outside the three central cities, which together total 274,000. The incorporated cities of Cohoes, Saratoga Springs, Watervliet, and Rensselaer have estimated populations ranging from 21,000 to 12,000. The unincorporated towns of Colonie and Bethlehem bordering Albany, and Rotterdam and Glenville bordering Schenectady had populations between 30,000 and 10,000 in 1950; since then they have grown considerably more rapidly than the incorporated areas.

Outside the official metropolitan area but still



General Electric's enormous main plant at Schenectady, bordered by the New York Central in the foreground, the Delaware and Hudson to the left and the Mohawk River to the right, encompasses more than 200 buildings on a site of over 600 acres. The massive white building in the right middleground houses the Large Steam Turbine-Generator Department.



Just east of Schenectady in Niskayuna is the Knolls General Electric Research Laboratory, the company's major center for advanced research. Adjacent to it down river but not shown above is the Atomic Energy Commission's Knolls Atomic Power Laboratory, usually shortened to KAPL; it is manned by GE research personnel.

THE CAPITAL DISTRICT

well within its sphere of influence is Amsterdam, 16 miles up the Mohawk from Schenectady, with 28,500 people; 10 miles farther up the valley are Gloversville and Johnstown, which together have over 30,000.

Somewhat more distant is Glens Falls, about 50 miles up the Hudson from Troy, with about 40,000 in the city itself and nearby communities. Thirty miles below Albany on the Hudson is the city of Hudson with 12,000.

Scattered throughout the area are smaller cities and towns, many of them well known, which are in some cases industrial and in other cases primarily agricultural and recreational centers. Examples are Canajoharie, Fonda, Cobleskill, Hoosick Falls and Whitehall.

Mountain-Girt Lowland

The Capital District is about evenly divided between lowlands and highlands, using the 1,000-foot contour as the dividing line. The northwestern third of the area consists of a large segment of the Adirondacks, a good deal of it wild and without roads. Much of the beauty of the Adirondacks is associated with the many lakes; in addition to lakes George and Champlain already mentioned, the larger ones include Schroon and Indian lakes and the imposing Sacandaga Reservoir.

The southwestern corner is taken up by northward outliers of the Catskills, including such ridges as the Helderberg escarpment visible from Albany and Schenectady. Along the eastern boundary are foothills of Vermont's Green Mountains.

The lowland area is by no means level except in small stretches; the varied terrain adds greatly to the charm of the countryside, which shows strong affinities with New England, with a Dutch accent.

Mineral resources are considerable, and are concentrated in the northernmost and southernmost counties, Essex and Columbia, respectively. Essex County is the leading producer of iron ore in the state; one of the iron ore mines, the National Lead Company's Tahawus mine, also produces ilmenite concentrates, a major source of titanium.

Columbia County is a leading producer of limestone for cement making and has two important cement plants, Lone Star and Universal Atlas.

Elsewhere in the area, substantial amounts of sand, gravel, building stone, and brick-making clay are produced. Unusual items include one of the world's largest active garnet mines, of significance in the abrasives industry, and a large slate quarry.

The climate is typical of interior areas in the

northeastern part of the country. Cairo, which is just outside the area but is representative of the southern end of the district, has a January average temperature of 26.5 degrees and a July average of 73.7. Whitehall, near the northern end, has corresponding figures of 21.1 and 73.2. Precipitation ranges from 32 inches at Albany to 44 inches at Gloversville, while snowfall varies from 42 inches at Cairo to 90 inches at Indian Lake, up in the Adirondacks.

Climatic and market considerations combine to make dairying the most profitable agricultural enterprise, and dairy products account for no less than \$43.5 million out of a total agricultural yield of \$70 million in 1954, the latest available reckoning. Milk production is both for the considerable local market and for New York City.

The leading agricultural counties are Columbia and Washington, both with yields in excess of \$12 million, followed by Schoharie, Montgomery, Rensselaer, Albany and Saratoga, all with over \$5 million.

New York State's well-known apples figure prominently in other farm output of the area, Columbia, Saratoga and Washington being among the leading producers.

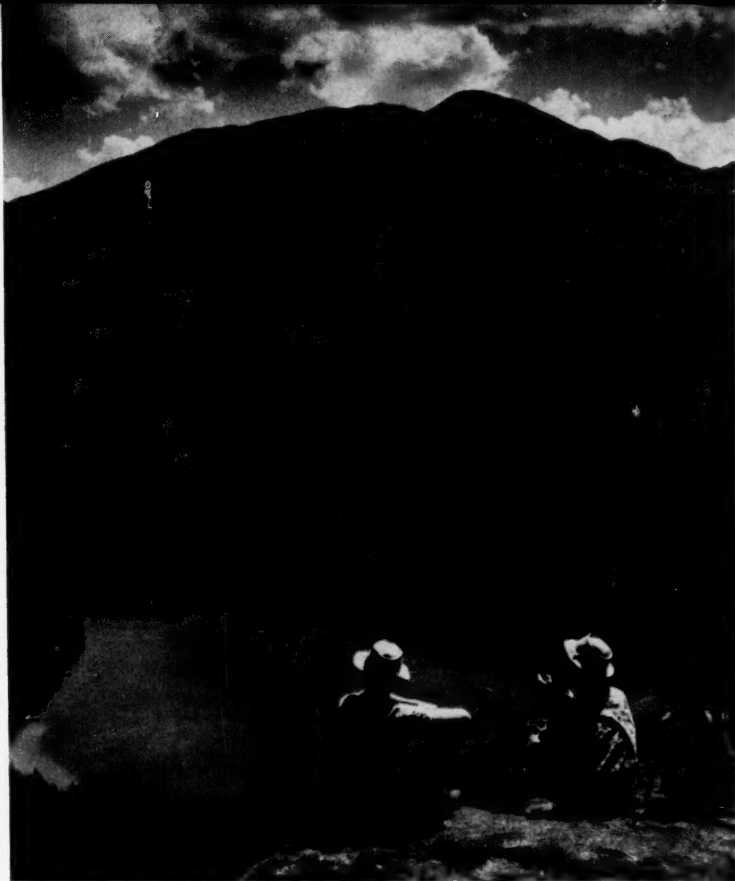
In the days when large stands of white pine in the Adirondacks and elsewhere were being cut, Albany was one of the nation's great lumbering centers and the paper industry had ample local supplies of pulp. Once the softwoods were largely logged off, imports of pulp from Canada became necessary, but recent discoveries of pulping processes using hardwoods have rejuvenated the local lumbering industry. New York's stand of hardwoods is larger than that of any other state outside of the South, which assures continued production for many years to come.

Prime Recreational Advantages

The combination of terrain, climate, and colorful historical background has made the area one of the prime resort regions of the nation — a matter of great significance to the local economy and a major advantage to the area in recruiting new industry and holding what it already has.

The 3,500 square miles of the Adirondack Forest Preserve maintained by the state, more than a third of which lies within the region, are the chief single attraction. Elaborate summer and winter resort hotels, all types of ski tows and lifts, innumerable summer camps and dude ranches, and many hunting and fishing lodges vie with the lonely mountain trails, hidden lakes, and great ex-

Three hours away from the 21st century in Schenectady's laboratories is the changeless world of the deep recesses of the Adirondacks. New York State maintains most of the area as a forest preserve to insure that its beauty will be passed on intact to succeeding generations.



Much of the glamour of Saratoga is associated with racing — either at the Raceway, which is the harness track shown here, or at the Racetrack for flat racing. The former is open from April to October and the latter during August.

THE CAPITAL DISTRICT

panases of forest to provide something for everyone.

Interstate 87, locally known as the Northway, is now under construction; it will cut down considerably on travel time to eastern Adirondack points as well as to Montreal.

Just outside the area to the southwest are the major Catskill resorts, and immediately east are the Berkshires and the Green Mountains. Thus a 50-mile drive in almost any direction from Albany reaches into vacation areas known all over the world.

Saratoga Springs was America's first major spa, and many people still come for the waters, although the racing and the historical associations are probably more important drawing cards.

Cold, bright winter days in the mountains, with plenty of snow, provide optimum conditions for skiers and other winter sports enthusiasts, while the warm days and cool nights in summer, pollen-free at higher elevations, are hard to beat.

Accessibility a Major Asset

The Hudson-Mohawk route is the main thoroughfare in the area by land, rail and highway. The old Erie Canal was replaced by the Erie Division of the State Barge Canal System, which utilizes the canalized Mohawk to maintain a 14-foot depth. Below Albany the Hudson is dredged to 27 feet — enough to allow the 15,000-ton Santa Paula to put in at Albany recently — and further deepening to 32 feet and widening to 400 feet is now under way.

Albany is a major petroleum products terminus and has one of the largest single-unit grain elevator in the country, with a capacity of 13.5 million bushels. Western grain reaches the port by rail or barge from Buffalo and Oswego and is shipped overseas from Albany.

The main line of the New York Central follows the left bank of the Hudson and Mohawk, except between Albany and Schenectady, and the West Shore division follows the right bank.

The New York State Thruway follows the right bank, often at some distance inland, throughout the area. It has eight interchanges within the area — two each at Albany and Schenectady and one each at Selkirk, Amsterdam, Fonda and Canajoharie.

There are also important water, rail and highway connections with the north. The Champlain division of the State Barge Canal System utilizes the Hudson upstream to Fort Edward, near Glens Falls, and thereafter a canal 12 feet deep to Whitehall and finally the Poultney River, which flows

into the southern end of Lake Champlain.

The main line of the Delaware and Hudson northward generally parallels the water route. The Northway, not yet completely marked out, is scheduled to run somewhat farther west, through foothills of the Adirondacks.

Eastward rail connections are via the Boston and Albany division of the New York Central to Pittsfield, Springfield and Boston, via the Boston and Maine across northern Massachusetts to Boston, and by connection with the Rutland into western Vermont.

The main highway connection eastward is by way of the Berkshire section of the Thruway to the Massachusetts Turnpike, more or less following the line of the Boston and Albany. Another important connection to Boston is provided by New York and Massachusetts routes 2, which generally parallel the Boston and Maine.

The tri-cities area is a natural for a major airfield serving all three chief cities and the Albany Airport is almost exactly in the middle of the triangle. It has service by American, Eastern, Mohawk and TWA. Glens Falls also has service by Eastern and Mohawk.

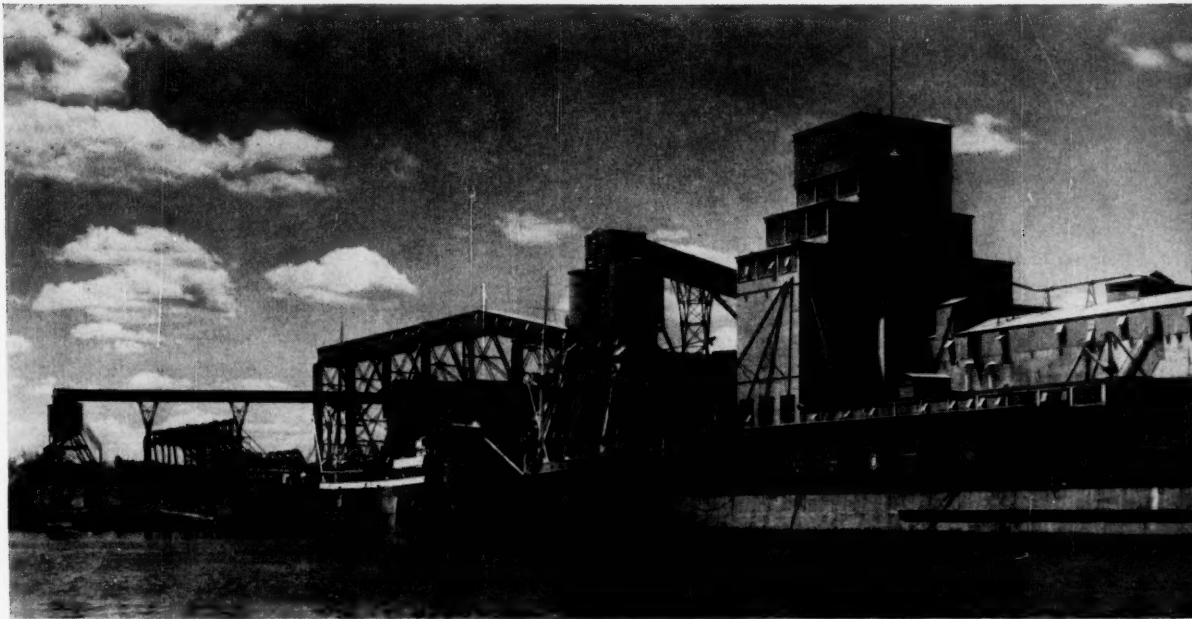
Schenectady County Airport, just northeast of that city, has four runways one of which is 9,000 feet long; it is of great importance to General Electric executives and is used extensively in tests on jet engines and other developmental work. Several other cities in the area have fields used by company aircraft.

Varied Employment and Products

It may seem odd to describe an area that includes the home of General Electric as one characterized by diversity, but that is actually the case. Although GE's employment has fluctuated in the years since Korea between 20,000 and 34,000, total non-agricultural employment in the metropolitan area has been well over 200,000 in most recent years.

Much of the basic employment in the area is outside manufacturing, notably in state and federal government offices in Albany and elsewhere and in the very active wholesale and mail order trade centering in Albany. Banks and insurance companies in Albany and Glens Falls and the faculties of Rensselaer Polytechnic Institute at Troy and Union College at Schenectady are other elements.

Within manufacturing, there is a good blend between non-durables such as apparel, textiles, leather goods and paper products, and such durable goods concerns as GE, Alco, Ford, Republic



Albany's port, which can be reached by vessels of 15,000 tons, is 150 miles from the sea. Leading imports are petroleum products and molasses (which is used for feeds), while grain is a major export item, as the huge elevator attests.



From many points along the Mohawk it is possible to pick out a whole series of major thoroughfares. Here at Canajoharie, looking southeast, are the main line of the New York Central, in the left foreground, the Mohawk, which is utilized by the State Barge Canal in this area, the Thruway, State Route 5S running along the far side of the Beech-Nut plant and just beyond it the West Shore Division of the New York Central.

THE CAPITAL DISTRICT

Steel, Allegheny Ludlum, and the Watervliet Arsenal.

Some of the leading food manufacturing concerns in the area are Beechnut at Canajoharie and Schaeffer Brewing and Tobin Packing in Albany.

Leading textile manufacturers are Mohasco, the Amsterdam carpet makers, and two industrial felt makers, Albany Felt and F. C. Huyck. Textile finishers include Palatine Dyeing in St. Johnsville and Lee Dyeing at Johnstown.

Apparel manufacturers include two large firms in Troy's standard line of men's shirts—Cluett Peabody and M. Nirenberg—along with such knitting firms as Beaunit, Van Raalte, Whittenton, Ballston-Stillwater, Johnstown Knitting and Swears. Other large apparel firms include Marshall Ray, a maker of men's sportcoats in Troy, and a Glens Falls lace maker, H. & F. Binch.

The paper industry has been a mainstay of the area for nearly a century and is notable for the variety of products. International Paper has plants at Corinth and Ticonderoga making book, bond and specialty papers.

Other leading paper firms are Finch Pruyn in Glens Falls, Scott Paper in Fort Edward, Eastern Tablet (a Rexall Drug subsidiary) in Albany, Mohawk Paper in Cohoes and Watervliet, John A. Manning in Green Island, Fort Orange Paper in Castleton and Arkell and Smiths in Hudson Falls.

The area boasts one of the large magazine printers in the country—the Williams Press in Menands near Albany. The Hearst and Gannett newspapers in Albany, the Times-Union and Knickerbocker News, respectively are other large employers in the area.

Leading chemical firms in the area include General Aniline and Sterling Drug, both in Rensselaer; the former makes dyestuffs and the latter carries on research in its Sterling-Winthrop Research Institute. Hercules Powder, noted above, also makes paint pigments at Glens Falls in the former Imperial Color, Chemical and Paper Plant.

The larger leather concerns include two tanners, Karg Brothers and G. Levor, and two glove makers, Grandoe and Crescendoe; all these are in the Gloversville-Johnstown area.

The non-metallic minerals field is represented by the Norton Company's Behr-Manning subsidiary in Watervliet, which makes abrasives from the local garnet referred to above and also makes pressure-sensitive tape.

Metal Goods

Metal-working began in Troy as early as 1809, even before textiles, and at one time it was a major center of stove production. It also turned out the plates used on the hull of the Monitor, thereby revolutionizing shipbuilding.

Primary metals firms in the area now include Republic Steel's plant in Troy, which uses ore from the Adirondacks, and Allegheny Ludlum's plant in Watervliet. Also in Watervliet are the U. S. Government's arsenal and a castings firm, Adirondack Foundries and Steel. One of the leading fabricated metals plants is Ludlow Valve in Troy.

The importance of the paper industry in the area has been a major factor in the rise of a Hudson Falls firm, the Sandy Hill Iron and Brass Works, which make paper industry machinery. Metal-working machinery is the specialty of Emhart Manufacturing in Hudson.

The electrical machinery field is of course dominated by GE's Schenectady plant, but GE also has a silicones plant at Waterford and plants at Fort Edward and Hudson Falls making capacitors. In addition, there are two other large plants in this class—Minnesota Mining and Manufacturing's subsidiary, Mica Insulator, in Schenectady and Espey Manufacturing's plant making transformer filters and coils in Saratoga Springs.

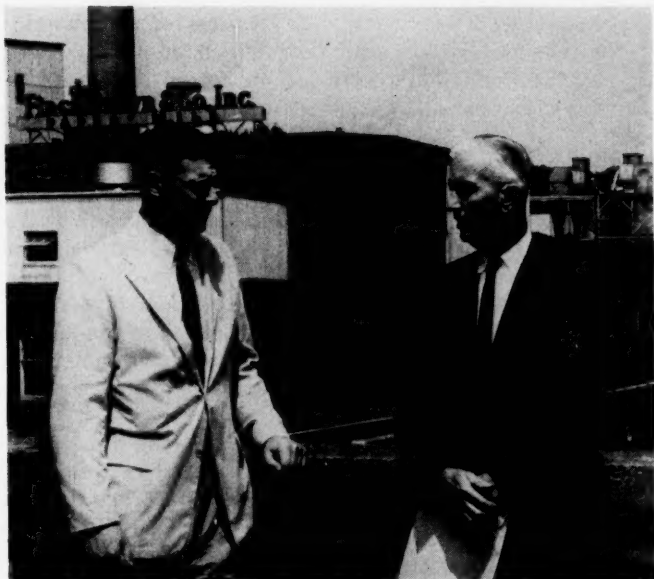
Alco Products, the descendant of Schenectady's famous old American Locomotive Works, is the leading representative in the transportation equipment field. It no longer confines itself to diesel locomotives but is deeply involved in turning out portable atomic power plants. Another plant in this category is Ford Motor's Green Island plant making radiators and springs.

In the miscellaneous category are Autograph Brush and Plastics, a Watervliet subsidiary of Johnson and Johnson making brushes, and the Decca records plant at Gloversville.

Plans for the Future

Throughout the Capital District plans are now underway for making room for the next round of industrial expansion. A major role is being played in every community by the local representatives of Niagara Mohawk, who subscribe heartily to the concept of community betterment as a means to improved business conditions.

The area is fortunate in that its mixed economy has greatly cushioned the inevitable shocks associated with the heavy buildup of defense indus-



Directly under his plant's sign is Lyman A. Beeman, Jr., Vice President of the paper company in Glens Falls. He and Donald C. Creal, area manager for Niagara Mohawk, are talking over expansion plans and taking advantage of a nice day at the same time.



This crankshaft will end up in an 1800-horsepower diesel locomotive at Alco Products' Schenectady plant. Alco Products continues as a major producer of locomotives, but is also entering the atomic field as a producer of portable atomic power plants.

THE CAPITAL DISTRICT

tries in war time and the cut-backs at the end of the war. Another favoring factor is that most of the war-induced expansion took place in permanent installations, such as GE, Alco, and the Watervliet Arsenal, rather than in strictly temporary facilities such as some of the shipbuilding yards, aircraft plants, and shell loading plants found in other areas.

Another fortunate circumstance is the combination of a big-city market in the metropolitan area with small-city and rural amenities over the whole region. Parts of the cities are old and congested and in need of renewal or rehabilitation — which are both actively underway — but there are no vast blighted areas and all but unsolvable traffic problems such as face many major metropolitan centers.

The small-city feature also shows up in the ease of communications between groups in the area and the infectious friendliness which greets strangers.

On the other hand, hotels, medical facilities, cultural opportunities, and research facilities would do credit to a very large city. Albany's position as the capital of the most populous and politically crucial state in the Union ensures frequent visits by the great and near-great in government, while the great prestige of General Electric has the same effect in the business world. There is nothing insular and withdrawn about the area.

The Big Three

Albany has always been the main commercial center of the region, and as large as the area is, Albany's influence extends far beyond — all the way to the Canadian border, deep into Vermont, and into western Massachusetts, as well as down the Hudson half way to New York.

Part of this is due to its great importance as a transportation center, with its port, the meeting of the New York Central's main line with several major branches, the headquarters of the Delaware and Hudson, its strategic location on a big bend in the Thruway, and its airport.

The city's main thoroughfare, State Street, climbs up a hill from the river to the state capitol, and is lined with imposing business and institutional buildings — one of the country's truly distinguished streets.

Its active chamber of commerce, managed by Robert Young, and such banks as the National Commercial Bank and Trust Company, where Arthur Cornelius heads up one of the few area development departments in a Northeastern bank,

are major sources of information for the whole region, as well as for Albany itself.

Two major forces for development of the region have headquarters in Albany — the Niagara Mohawk Capital District office, where R. H. Stratton and Storrs M. Bishop are, respectively Administrative and Commercial Vice Presidents, and the Capital District office of the New York Department of Commerce, whose Regional Manager is John S. Wyld.

This year the leadership of the Tri-City Area Development Council of the Albany, Schenectady, and Troy chambers of commerce is in Albany, as the current president is Gene Robb, Publisher of the Times-Union.

Schenectady has long proclaimed that it "lights and hauls the World," a reflection of the importance to the city of GE and Alco. GE is currently undergoing a transformation in Schenectady, to the tune of no less than \$219 million dollars, that will strengthen still further the headquarters, research, and heavy capital goods aspects of its operations there, while many of the consumer products formerly made there have been transferred elsewhere.

This has involved some over-all loss of employment in the area but has increased still further the concentration of highly paid scientists, engineers, and technicians — now the largest anywhere in the world employed by a private corporation. A good share of these have come to staff the Knolls Atomic Power Laboratory, usually shortened to KAPL. Another atomic installation in the area operated by GE is the West Milton site owned by the Atomic Energy Commission.

One effect of this will be to raise still higher the educational level of the population. Already in 1950, Schenectady County residents over 25 had completed a median of 11.0 years of school, as compared with a state figure of 9.6 and a national figure of 9.3. Union College in Schenectady contributes a good share of the highly trained people required. Dating back to 1795, it is now incorporated with medical, law and pharmacy schools in Albany as Union University. It has never lost its very strong liberal arts foundation, but is heavily committed to scientific and engineering training as well.

The Schenectady Chamber of Commerce, which has done notable work in improving the local business climate, has now been joined in the area development field by a new organization glorying in the name of GUTS — Gear Up for Tomorrow in

The Union College campus in Schenectady is a graceful mixture of Federal, American Gothic and modern Functional; the round building in the center is the Old Library. Union was the birthplace in 1825 of Kappa Alpha, the oldest social fraternity in continuous existence.



Sites galore in Schenectady seems to be the main burden of what Chuck O'Connor, industrial development specialist of GUTS (Gear Up for Tomorrow in Schenectady) is discussing with Harry Lockwood, President of the Schenectady Industrial Corporation, Joseph F. McClure, Executive Secretary of the local chamber, and John V. Lasher, the local Niagara Mohawk manager.

THE CAPITAL DISTRICT

Schenectady.

This group cooperates closely with the Schenectady Industrial Corporation. One GUTS leaflet pictures 30 local citizens all ready to answer inquiries on the suitability of the city as a plant location—they are a complete cross section from GE executives and Union College dignitaries to local labor leaders.

Troy has the most varied manufacturing in the area and the longest background in industry. One of its specialties is the men's shirt industry, which got a big boost when a Troy housewife made the first shirt with a detachable collar.

Its metal-working industry is mainly across the Hudson in Watervliet, where the government arsenal and Allegheny Ludlum are located, and in Green Island with its Ford parts plant, but Republic Steel's plant is in Troy itself.

Troy is of special significance to the area now as the site of Rensselaer Polytechnic Institute, the nation's oldest institution specializing in science and engineering. With a student body of 4,000 and a faculty of 500, it is the chief local source of scientific manpower and carries on a number of major research projects of great importance to local industrialists.

Now under construction are its Science Center and its LINAC facility, a linear accelerator being set up with the joint sponsorship of the Atomic Energy Commission. It is scheduled to play a vital role in nuclear studies and may appreciably advance the day when thermo-nuclear power becomes commercially feasible.

RPI also has a sub-critical atomic reactor, a betatron and a cobalt-60 pool. It is currently engaged in a \$9 million fund drive to expand its capabilities in both research and instruction.

Elsewhere in Troy are a liberal arts college, Russell Sage, which also has an evening branch in Albany, and a new state-sponsored two-year technical school, Hudson Valley Community College, which is building a new campus south of the city and is expected soon to expand to a four-year curriculum.

Much of the new spirit pervading Troy these days is the result of efforts of David Turner, Executive Vice-President of the local chamber, and Edward B. Doherty, Vice President of the State Bank of Albany's Troy office, and for a number of years the chairman of the chamber's Industrial Development Committee.

A major victory in the effort to improve the local business climate was the successful campaign

in 1959 to have the city adopt the city manager form of government. A solid basis for further community improvement is a five-volume analysis of the city by five RPI professors and the resulting master plan now being formulated.

Of major concern in plans for the future of Troy is the provision of more space for new and expanding industry. In May of this year the old Troy airport, south of the city, was vacated and is now available as an industrial site.

Mr. Doherty's activities in behalf of clients interested in locating in the area very definitely include aid in plant financing. In one case, he was able, on the basis of quick contacts with all the banks in the area, to come up with an offer of 100 per cent financing of an \$800,000 plant.

The Whole District Is Looking Ahead

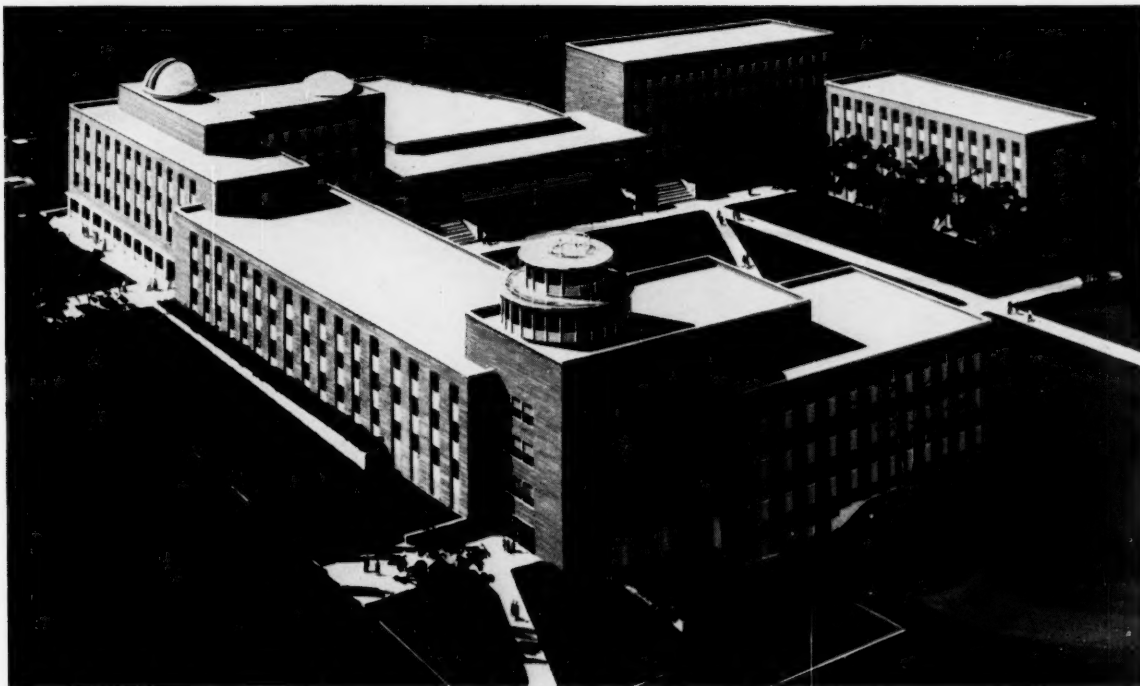
Outside the metropolitan area, community groups also have stories to tell. Glens Falls has several small new industries and a notable number of expansions, including those at Glens Falls Portland Cement (now part of Flintkote), General Electric, Finch Pruyn and U.S. Catheter and Instrument. The Union Bag-Camp Paper plant has installed a new paper honeycomb packaging unit developed from a local invention.

Harold Zenger of the Glens Falls chamber and Donald Creal, the local manager for Niagara Mohawk, are quick to point out the good labor-management relations of the area, which are manifest in the non-involvement of local unions in industry-wide strikes.

Amsterdam has received nation-wide recognition for the community effort that was mounted when one of its big carpet manufacturers left the area and 1,700 were without jobs. The local chamber, managed by Thomas Zappone, helped form Industries for Amsterdam, Inc., which raised \$300,000 by public donation. Today, John Kosinski, attorney and banker, heads the latter organization.

In the past five years, 17 new industries have been located in the area, and three others are in process of establishing new operations. Two new plants have been built and 80 per cent of the 2 million square feet of vacated factory space has been put back into production.

Saratoga Springs has a new General Foods carton plant involving an expenditure of \$3 million and employing 500. The city won out over a large field of rival communities in the Northeast chiefly because of plus factors in transportation, labor supply, and local business climate.



Rensselaer Polytechnic Institute is in the course of a major expansion in Troy to heighten its already great capabilities for research and advanced technological instruction. Shown here is a sketch of its new Science Center now under construction.



Edward B. Doherty, a peppery little Irishman who is the Chairman of the Troy Chamber of Commerce's Industrial Development Committee, makes sure of a point with George L. Johnson, local Niagara Mohawk manager.

THE CAPITAL DISTRICT



First fortified by the French to command their invasion route southward toward Albany, Ticonderoga was a major objective of Colonial and Revolutionary strategists. Its guns, menacing enough in their day, are objects of curiosity for thousands of tourists.

In one of the smaller communities in the area, Hoosick Falls, the local non-profit corporation which in 1949 raised \$74,500 to build a plant is now in a position to begin paying back the investors. The plant has been leased ever since its completion to a shoe company. More recently, the old-established Wood-Flong Company, makers of newspaper mats, decided to remain and expand in Hoosick Falls, after canvassing a large number of other communities, rather than move outside the area.

The prize asset of the Capital District is its excellent location in the transportation center of the heavily industrialized Northeast. This not only means a vast market but an ideal procurement

Complete plant location services for the Capital District are provided by the Niagara Mohawk Power Corporation's Area Development Department, 300 Erie Boulevard West, Syracuse 2, New York. Reprints of this editorial survey, conducted by ID/MR under Niagara Mohawk's auspices, can be obtained from Richard F. Torrey, Director of the Department.

area, where almost every imaginable item needed as a raw material, part or subassembly is either manufactured or marketed within easy reach.

Almost equally telling factors in its favor are the quality of living and the research capabilities, either locally or in nearby areas.

An active phase of the area's current economic planning of great potential value to the industrialist is the designation, survey and protection by zoning of attractive industrial sites all over the region.

The GUTS organization in Schenectady, for example, is interested in no less than 37 tracts ranging in size up to 90 acres in and around the city. Many of them border the Thruway on one side and a rail line on another, while a fair number are along the Mohawk.

The New York Central has a brochure with aerial photographs, topographic maps and detailed descriptions of eight sites along its lines within the metropolitan area; they range in size from 240 to 1,100 acres.

As the many projects of road construction, urban rehabilitation, and other capital investment continue the transformation of the area now underway, the prospects of the Capital District are good and getting better.

BUSINESS CLIMATE: DON'T STOP AT APPRAISAL!

Reviewing his own company's outstanding business climate improvement program, an official of General Electric makes the point here that in selecting a new location or considering an expansion of an existing plant, you should not overlook the opportunity to improve community attitudes through your own efforts.

By Richard H. Peake, Jr.

Over the years progressive industrial management has achieved a high degree of skill in sizing up prospective plant locations. The relative importance of the orthodox criteria such as nearness to marketing centers, accessibility to raw materials, adequate transportation facilities, electrical power and availability and adequate water supply will vary according to the specific needs of the particular business.

Just as plant location survey criteria vary from business to business these criteria even for a given business are far from static. To be of real value they must reflect accurately all of these conditions which affect the ability of a business to operate to the full extent of its usefulness for employees, customers, share-owners, suppliers and the public at large.

Such a picture or profile of a community has been characterized as the community's "business climate". Like public and family relationships, each community has its own distinctive business climate, with both its assets and its liabilities.

The business climate picture of community departs in important detail from the traditional and orthodox assessment of a community. This distinction is found in what might be termed attitudinal as well as other cost factors which are vital from the standpoint of their effect on not only

the immediate, but also the long term success of the business.

These factors are represented by the attitudes, the actions, the morals, the prejudices and the political behavior of the people of the community. For example, our experience has shown that if we are planning to risk an investment of \$8, \$10 or \$32 million in a new plant location, it is important to us to know in advance the attitude of the people in that area toward business, whether it was fashionable to do a good day's

work — or whether featherbedding and other make-work schemes are rampant; whether or not the union officials in that area have push-button control, regardless of the merits of the controversy or the issues. We want to know whether the local government is efficient and honest. Are the candidates men of integrity? Are they consistent? Are they conservative? Or is the government machine-controlled and corrupt?

We are interested in knowing the voting records of the governmental

COMMUNITY RELATIONS EXPERT

Richard H. Peake, Jr., manager of public affairs in Ohio for General Electric Company, has wide experience in the community relations field. Before joining GE in 1953, Mr. Peake did public relations work for American Airlines, General Motors, and William S. Merrell Company. In his present position, which he has held since November, 1959, he is primarily concerned with helping GE managers throughout Ohio in their efforts to improve the business climate in their communities. A native of Virginia, Mr. Peake is a graduate of Virginia Military Institute. The accompanying report is adapted from a talk he made recently before the Metropolitan Toledo Industrial Clinic.



BUSINESS CLIMATE

representatives to the state capital and to Washington on issues affecting business. It is our conclusion that these factors mean much more to the profitability of our investment than the old orthodox criteria. Today then, after our real estate people evaluate a prospective plant site based on their objective criteria, it is looked at from the standpoint of the Business Climate of the state and the particular locality in question.

Ten Point Examination

GE's examination of the business climate covers the following ten points:

1. A progressive attitude on the part of civic and political leaders toward sound community growth and city planning.
2. Citizen understanding of community and business problems.
3. Honest, efficient government, supported by a safe majority of alert, intelligent voters who have the balanced best interests of the community at heart.
4. An absence of unreasonable restrictive regulations and discriminatory taxes imposed on business by the local and state governments.
5. A sound working relationship between employers and employees as evidenced by an absence of unwarranted strikes and slowdowns over a number of years and, wherever collective bargaining contracts are in effect, a constructive and responsible union leadership which acts as the servant rather than the master of its membership.
6. An adequate supply of people to fill employment needs, people with good work attitudes, with required educational levels, and preferably, people who have some understanding of how our business system operates and their stake in its success.
7. Prevailing wage and salary rates which are fair to employees, and which, at the same time, enable employers to compete profitably and grow in their business.
8. Adequate community services and facilities such as utilities, banks, hotels, shops, health facilities, and the required com-

mercial services needed in operating a business.

9. A social and cultural atmosphere that will attract and hold good professional employees. This would include adequate schools, museums, libraries, little theatres, an enlightened press, radio and TV, and an abundance of healthful recreational opportunities.
10. A serious-minded assumption of business citizenship responsibilities on the part of all employers in the community as evidenced by consistently good employee relations and courageous leadership in civic and political affairs.

Many of these ten factors are intangible and stem from a root attitude of the community toward business, which is reflected in many ways. For example, an unfavorable record of strikes and slowdowns over the years is probably one of the most discouraging factors of all to a prospective employer.

The physical condition of housing, shops and neighborhoods is one of the most dependable attitude indicators. What prospective employer wants to settle in a community where people appear to be shiftless — where no one seems interested in cleaning up, in painting his house and properly maintaining his personal property — or where slums and neighborhood blight, like termites, keep eating away at the heart of the city. Such things indicate public apathy.

Productivity is a reflection of work attitudes. Direct comparisons of turnover rates, safety records, plant absentee records and on the spot observations tell much about work attitudes.

You can do something about the business climate. We have come to believe that the best approach is to demonstrate to the communities in which we operate that our relationships with the community really form a two-way street; that, we, of course, owe the community certain obligations, such as supplying an increasing number of stable jobs, helping improve the standard of living of that community, doing our fair share tax-wise, supporting charities and being a good corporate citizen — but, in exchange this community owes us, and other local

business enterprises, a set of obligations if they are to help present employers to stay in the community and to prosper.

Appraisal Is First Step

Our first step is appraisal, following our "Guide to Making a Business Climate Appraisal", which requires answers to 187 questions in nine different categories. Each of these 187 elements is rated "good", "doubtful", or "bad". The bad symptoms of the climate are then drawn off on a worksheet and traced back to the root causes. (One root cause may be responsible for three or four poor business climate elements.)

Having done this, our managers are then ready to take Step 2 — which is — determine their goals. Those goals which may take perhaps less than five years to achieve are designated as "short-range" goals and those will require a longer time are considered "long-range".

Some of the short-range goals selected by our managers in different communities include skilled labor supply, improvement of educational standards and teacher compensation, impartial law enforcement, promotion of public demand for responsible union leadership, public acceptance of voluntary unionism, public support for higher productivity.

Longer range goals include a less restrictive building code, prevention and remedy of urban blight in the downtown areas, development of a college to the community, a more efficient type of local government, and revision of the corporate income tax to provide incentive for expansion.

Step 3 calls for the manager to determine and then plan and delegate the work required to achieve the goals he has set for himself. And in doing this, he has to ask himself these questions: (a) How much of this work can I get done in my role as president, chief executive or general manager of the business in this town? Not too much! (b) How much can I get done through my middle managers, supervisors, foremen and my professional employees such as engineers, scientists, marketing people, financial people. A lot! (c) And how much can I get done through enlisting the support of our individual employees, our non-exempt salaried and blue-

BUSINESS CLIMATE

collar production workers? And surprisingly enough, here is a real gold mine. These employees are willing to go to work to help improve the Business Climate if we are able articulately to explain to them what they need to do, what they can do, and why it is in their self-interest.

Once we ourselves have gone through Steps 1, 2, and 3, we feel that we are prepared to go to other employers to help with Step 4—the day-to-day work of carrying out the program worked out in Step 3. The best results are achieved when the top business leaders in the town go at the work on a do-it-yourself basis.

Where this has been done, there have been outstanding results in a number of states—New York, Rhode Island, California and others. A good example in Ohio is Akron where 50 manufacturers—the employers of 75% of the city's industrial workers—cooperated in a "community inventory of their business climate". These businessmen identified community wide improvement goals in which they had a common interest at stake.

This, then, is a concept for solving problems which were once believed had to be endured passively. Managers who are using it are increasing the profitability of their companies, the security of their employees and the prosperity of their plant communities by improving communities by improving their business climate.

General Electric Chairman Ralph J. Cordiner puts it this way: "Let us have no doubt about our right or our responsibility, as businessmen, to improve the climate in which our companies operate. Through specific action, company-by-company, we can exert a constructive influence on all the outside conditions that affect the cost and ease of operating a business in the community. If we are successful in this, we will simultaneously increase the usefulness of the companies we manage, and improve the ability of the community to attract and hold desirable employers.

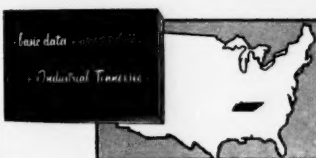
The professional manager must now recognize these new challenges and accept them as part of this total responsibility. He must see them not as an added burden, but as a fresh opportunity to make his own work and the work of his company more richly rewarding for everyone concerned."

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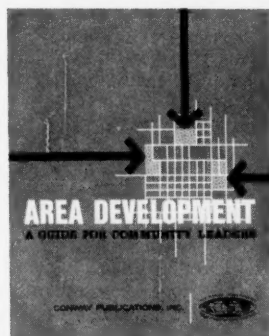
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PRIVATE

versus

PUBLIC

WAREHOUSING

"In the selection of a warehouse, what are the alternatives open to you, and how do you determine the type of operation that will be best suited to your particular problem?" Here's a timely analysis by a top-flight transportation and distribution specialist.

By J. L. Wilson

The acumen necessary in maintaining satisfactory profit levels in recent years has placed a greater responsibility upon industry, in spite of increased production and increased sales, to meet the needs of an ever increasing market. Management has, therefore, taken a more thorough look at all costs of doing business.

Manufacturing processes and sales methods have been streamlined. Greater mechanization has been evolved to handle the detailed task of the necessary paper work. And in the midst of these operational refinements, physical distribution has been reviewed. No longer is it looked at as though it were "a necessary evil" in the course of doing business, but, if planned and operated properly, is one of the "keys" to improved profits. From this new look is resulting a new concept in physical distribution, a planned method for improved movement of goods from point of manufacture to the ultimate consumer, and giving greater cost controls than had been considered possible in past methods.

Industry is aware that the three major costs of doing business, in

order of importance, are labor, raw materials, and distribution. It then follows that profits are not only made possible by efficient manufacturing processes and sales methods, but also by well supervised and controlled distribution costs.

We can recognize the elements that make up total distribution costs as being the costs of operating the traffic and shipping department, the investment and related expenses of material handling equipment, the transportation charges, packaging and dunnage, and warehousing operations.

While much could be discussed relative to any one of these distribution factors, these comments are restricted to warehousing as it is related to distribution, since it is a large factor in product handling.

In stating that Physical Distribution is a well organized plan to place finished goods into the hands of the consumer from the point of production, speedily and economically, we must be aware that there is not a standard formula that can be given for all industries since requirements vary.

One industry may find it to be advantageous to ship direct to the

customer and eliminate field inventories. Another industry may feel that it is important to carry local inventories near the consumer to provide fast delivery, and where it also provides a cushion against production stoppage for whatever such reason might be.

If we are in an industry that finds field warehousing to offer the most economical or desirable distribution plan, considerations must be made to determine where these warehouses will be located.

A number of programming techniques are available to determine where such warehouses should be placed and the number of warehouses to be used to give the optimum number and location. Such a study will determine several courses of action that may be followed. Generally speaking, such a programming is an "iterative" process until a least cost distribution plan, from producing point to customer, evolves.

In the election of a warehouse, what are the alternatives open to you and how do you determine the type of operation that will be best

(Continued on page 98)



*4 billion gallons of
clear industrial water
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Alfred Russell

GOVERNOR OF THE STATE OF WASHINGTON



Just a year old and working 'round the clock, the big new Boise-Cascade pulp and paper mill at Wallula, Wash., produces 200 tons of kraft paper daily, fashions it into quality containers. Close to its supply of raw materials, with power, water and fast transportation all at hand, the plant is ringed by rapidly-growing agricultural and industrial areas where its production is readily marketed.

For your free copy of "BASIC ECONOMIC DATA AND INDUSTRIAL SITE INVENTORY" write to Sam Boddy, Jr., Acting Director, Washington State Department of Commerce and Economic Development, General Administration Building, Olympia, Washington.

**THE SURPRISING
STATE OF WASHINGTON**

WAREHOUSING

(Continued from page 96)

sued to your particular problem?

There are three basic warehousing plans that you may choose from:

1. Privately owned and operated with company personnel.
2. Leased warehousing space and operated with company personnel.
3. Negotiated warehousing and handling of product with public warehouses.

The three different warehousing options are employed by many types of industries. It will be found that individual industries will, at times, employ all three within their distribution pattern.

A large manufacturer, having a heavy production and marketing throughout the entire country, may elect to operate his own warehouse to meet the peculiarities and complexities of a wide area of products. He may have numerous, widespread points of manufacture. Because of these complexities, he may find it more economical to establish

the public warehouse.

In the highly perishable fresh meat portion of our business, the problem of handling facilities transportation and distribution does not lend itself well to public warehousing. In our ammonia and abrasive divisions, we use a lease plan of warehousing with company personnel. These two particular operations require a packaging or order filling operation that requires well trained personnel conversant with the requirements of these particular operations. In our Grocery Products Division, we use the facilities of public warehouses since such operations can perform well to meet our requirements.

How then do you determine which warehousing plan will fill your need? What factors will you use to determine what your warehousing needs are? What costs will you analyse to arrive at the most economical plan?

Undoubtedly, from a customer service standpoint, you will have

the requirements that industry will provide for itself in the successful handling of distribution. Through their various trade associations, they have benefited and advanced in their operations through the many educational and workshop programs, built around their industry for the handling of distribution goods.

I say this only to indicate that industry does not have any latent advantages in storing and handling of which the public warehouseman is not aware. He is equally as well geared to meet such challenges. Industry can, therefore, be assured that this industry warrants its confidence when the type of warehousing is being determined.

In my mind, one of the primary determinations to be made in deciding private warehousing versus public warehousing, is flexibility. One of the early leaders in the new distribution concept, is W. H. Gribble, director of distribution of the Pillsbury Company. He has stated this same philosophy. As patterns of distribution continue to change, the privately owned warehouse may find itself in a misplaced area. It is simple to make a change in the public warehouse location to meet such changes. The same is not true of the private warehouse.

With Armour and Company, we started a direct service to the customer several years ago, by-passing the previous intermediate step of dealing through the branch house which had added uselessly to our cost of product delivery. The use of the public warehouse was a necessity since time did not lend itself to building our own locations had we even considered such a move. As we have continued to streamline our distribution patterns, we have found it to be to our advantage to change some of our public warehouse locations. What might have happened to private operations had they been built?

Your attention has been directed toward making an accurate appraisal of your "total distribution cost." Certainly, in the area of such an appraisal, you would want to know what your warehousing costs contributes to your "unit cost" of distribution. If we compare this cost contribution on the basis of the private versus the public warehouse, which type service will provide the

Prior to his recent appointment as director of physical distribution for Borden Food Company, New York City, J. L. Wilson was manager of the transportation and distribution department for the Grocery Products Division of Armour and Company, Chicago, for eight years. He also had served before that as assistant to the traffic manager of Red Jacket Coal Sales in West Virginia and Virginia. A graduate of Marshall College at Huntington, West Virginia, Mr. Wilson received his Masters Degree in economics and business from the West Virginia University. The report here is based upon a talk he made before an AMA conference in San Francisco earlier this year.

privately owned and operated branch houses. The branch house also serves as a service organization.

The smaller manufacturer may not find it feasible to use private warehousing since his demands are not as great, and the aspect of his marketing and distribution may be more simplified. He may find that the public warehouse will meet his needs with the same results that the large manufacturer secures through the privately owned operation.

In the instance of my own particular company, we employ the previous suggestion of using a combination of company owned warehouses or branches, leased warehousing locations, and the use of

to determine if your distribution activities can be equally served as efficiently by the public warehouse as by your privately owned location. If you have determined that your distribution lends itself equally to either type facility, then you will be interested in determining the comparative cost of each.

The concept that industry may have had in the past about the place of the public warehouse, a storage area, is not the concept that will be found in the operation of the modern warehouse. The present day warehouse is not merely a point of storage; it is an industry that is fully aware that storage is only an intermediate step in a variety of services that are necessary to meet

most stable figure from month to month? It is inevitable that there will be peaks and valleys in sales. There will be fluctuations in inventories to reflect these high and low selling periods. If inventories are properly controlled during these periods, the unit cost for goods in the public warehouse will remain relatively the same.

In the private warehouse, there are expense factors at work that cause the warehousing unit cost of the product to fluctuate. The square footage paid for in the private warehouse remains fairly well fixed regardless of the turnover of products. The investment is there, and it is not paying the same return in the "lows" as it does during the "highs." This holds true for all of the fixed expenses which are a part of private ownership.

The public warehouseman can spread overhead expenses between all of his accounts. With a variety of merchandise that he handles, he is better able to take up the slack. He is not dependent upon any one group of products. This in itself is one of the basic reasons that the public warehouse can do the same

job at a cheaper cost to the storer than the small or medium sized manufacturer can do for himself.

Good warehousing is the result of years of experience, perfected by trial and error. There is no argument that, all things being equal, industry would generally rather manufacture and sell, and leave the operational burdens of warehousing and handling of goods to the warehouseman.

Yet, there are those who would go into private warehousing because the acquisition and operation would appear to be the simple procedure of construction and maintaining the necessary personnel to handle the operation. However, a general approach to the question of private warehousing would be the questions:

1. Will the company-owned warehouse be a convenience, or will it be a future problem and a white elephant?
2. Will it be an advantageous outlay of money, or will it be a burdensome expense?

To determine the answers to these questions, decide what must go into building and maintaining of

a warehouse. When you have considered all necessary expenditures, compare your unit basis of cost of your own operation with that which you would encounter with the public warehouse. Which is cheaper?

The biggest problem area here will probably be found in the fact that warehousing may be considered to be so simple an operation that the inexperienced don't know what such costs are and, therefore, will over-simplify the problem as to cost comparisons. The unit cost, as determined from negotiation with the public warehouse, will be reasonably accurate if you have presented your warehousing and distribution plan in proper detail to allow a complete quotation of costs that are fair and equitable with service requirements. The warehouseman knows his entire cost and will quote accordingly.

Private ownership of warehouses too frequently assumes that a particular service can only be had by employing company personnel, trained in the needs of order handling and assimilation. The cost of operating the warehousing unit is

(Continued on page 100)

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An industrial brochure, with 10 chapters and 24 pages, has been published by the Largo (Florida) Chamber of Commerce. Dwight Holmes, chairman of the New Business and Industry Committee, said the booklet highlights the major plant location factors in Largo and is available on request.

* * *

A record total of 11,651 manufacturing concerns is listed in the 1960 edition of the Canadian Trade Index, according to T. R. McLagan, president of the Canadian Manufacturers' Association. This is an increase over last year of nearly 400 companies. The Association has headquarters in Toronto.

* * *

A new industrial park, containing 1,158 acres, is being developed eight miles south of Orlando, Florida, near the Martin plant. Principals in the organization developing the park are H. M. Dixon of Orlando, and Robert Holder of Atlanta. Purchase price of the land, which was bought from Meadville Corporation of Philadelphia, was reported to be \$1.357 million.

* * *

The Idaho Department of Commerce and Development has recently set up an industrial research division, and the department has begun publication of an industrial and economic bulletin. Further out-of-state industrial promotion trips are planned and effort in-state has been increased to further growth and diversification. The department is headed by Miss Louise Shadduck who was appointed to the job in 1958 in a precedent-shattering move made by Governor Robert E. Smylie. Since that time she has focused western attention on the important role women are playing for industrial development. She heads a staff of 10, and her department is responsible for tourist promotion as well as industrial development.

(Continued on page 102)

WAREHOUSING

(Continued from page 99)

accepted as a cost of doing business without completely analysing such cost. What might a true picture present?

Private ownership means "capital outlay." The first major considerations are to determine where you will build, the availability of the type of land that you want, and the cost of the location. Such a preliminary study requires consultation with trained people who know the local problems of the area being considered. This requires fees.

Suitable construction or acquisition of existing construction requires engineering and architectural specialists. What type of building will be suitable? What are the many items that such building requires? What are the items of upkeep? If you outgrow the building at a later date or it becomes obsolete for your operation, will you be able to find a buyer whose requirements match the type of building you wish to dispose of? Will you be able to recover a fair proportion of your investment?

The warehouse must be equipped with handling equipment of the proper type to give efficient, low cost operation. You must provide a maintenance program to service your handling equipment.

What is the availability of the type of labor that you will need? There is a big responsibility in securing the type person that you want, training such personnel, personnel relations, labor problems, supervision, and separation.

There are other major cost factors to be determined. There must be provisions for warehouse services administration. Local office personnel must be provided, and the necessary equipment for such an operation. Cost records must be maintained for maintenance of building, material handling equipment, building services, utilities, the various type of taxes, personal and property insurances, and transportation services. Legally qualified personnel must be retained to interpret individual state and local laws covering warehousing. A competent organization must be set up within the management group to supervise all the warehouse operations. This requires specialization.

I have intentionally pointed out

only the highlights of warehousing considerations that must be focused upon in private ownership. Any one of the major considerations could be explored and broken down much further.

The obvious conclusion is that private warehousing requires a heavy outlay of capital and a thorough knowledge by trained personnel to maintain a satisfactory and adequate warehousing operation. The economics of it can only be determined by making adequate comparisons.

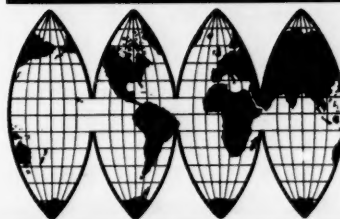
The public warehouseman will offer the following possible advantages of using his service:

1. Experienced operators already are located in all of the important distribution centers. Such locations have been selected to be nearer to the markets than might be possible by your own branch location.
2. Warehousing and handling costs are known in advance, and can be used in determining unit cost for inclusion in determining selling price levels.
3. Capital investment is not required. Costs can be predicated on service required. You pay only for service given.
4. Handling equipment is available for all types of products. The private warehouse might find it expensive to maintain such requirements.
5. The warehouseman is prepared to handle heavy or light shipping requirements. Peaks and valleys are no problem to you.
6. The warehouseman will provide the many accessorial services necessary to doing business at a cost normally cheaper than the private warehouse can furnish. Clerical help is eliminated.
7. Protection of goods and responsible management often not obtainable in private warehousing.

These are the major costs of warehousing which must be considered. Physical distribution determines that cost which will be added to the basic cost of manufacture at the end of the production line. If warehousing be an adjunct to your successful merchandising program, choose it wisely. What will it cost you?

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METROPOLITAN ATLANTA — Nine Industrial Districts offering planned sites of varying location, size, price. Services available: (a) optional, (c) (e) (g) (f) optional, (p) (r) (s) (t) (w). For data on these and other sites at Atlanta contact F. Wm. Broome (member, AIDC) Manager, Committee of 100 DeKalb County, 121 E. Ponce de Leon Ave., Decatur, Ga. Atlanta Phone, DRake 8-3691.

Iowa

IOWA "MANUFACTURING MEADOWS" — Clinton, Iowa (population 35,000), 138 miles west of Chicago on Mississippi River and Lincoln Highway (U. S. 30), 190 acres within city. Master plan by Skidmore, Owings & Merrill. Served by Chicago and North Western Railroad. Developed by Clinton Development Company, a civic-non-profit corporation. CHapel 2-4536. R. J. Stapleton, Managing Director. Services available: (a) (optional), (c), (e), (g), (f) (optional), (p), (r), (t), (w), restrictions.

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Gateway Urban Renewal Area, Kansas City, Kansas. 17 acres of restricted industrial sites adjacent to business district. Rail service available. Urban Renewal Agency, 619 Ann Avenue.

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BRIEFS

(Continued from page 100)

A survey of the business climate in South Carolina has just been completed by the South Carolina State Chamber of Commerce, Columbia. Chamber officials said the study is "based upon thoughtful opinions expressed by 285 executives of manufacturing firms in the state." Results of the questionnaires sent to the executives were compiled for the Chamber by the School of Business Administration of the University of South Carolina. Copies of the survey results are available from the Chamber.

The Virginia State Ports Authority has announced that it will revise its staff organization to disestablish the bureaus of Public Relations, Commerce and Planning, and set up the offices of Research, Public Relations, and General and Commerce Counsel, and Engineering. The change also will establish a Commerce Department, headed by a new position known as Director of Commerce Development. The latter will have the responsibility for the planning, direction and supervision of all the Authority's solicitation programs and activities, and of the offices and personnel involved. The Authority's offices are in Norfolk.

The Great Falls, Montana, Chamber of Commerce has announced formation of an Industrial Development Corporation. Officials said services of the corporation would include making industrial sites available at "non-inflated values" and assisting industries in solving site problems. The corporation expects a long-term need for a capitalization of \$500,000, but the initial goal will be only \$100,000.

A public relations program which has attracted much interest in the industrial community has been carried out by the Mount Vernon (Ohio) Area Chamber of Commerce. In the program the city has published 2,000 special editions of The Mount Vernon News, each personalized to 2,000 firms, welcoming the individual companies and key personnel to Mount Vernon. The special editions, which contain information about the advantages of the area, are being sent to 2,000 industrial firms, in various parts of the country, which do not

(Continued on page 104)



RECENT RELEASES

By Suzanne Johnson

GENERAL REPORTS

The European Common Market. New Frontier for American Business. This publication examines all the implications of the European Common Market, particularly those for American business. It shows: how the European Common Market was conceived and planned, what trends and attitudes in the ECM countries may influence the American manufacturer, and how ECM itself will affect many aspects of U.S. business. It is the first book to analyze the European Common Market from the viewpoint of the American manager. American Management Association, Inc., 1515 Broadway, New York, New York. 1958, 220 pages, \$6.00.

Chemical Economics Handbook, March, 1960 Installment. Stanford Research Institute, Menlo Park, California. 1960, 100 pages.

Listen, Mr. President . . . by George Black. A series of monologues on advertising, publicity, and the promotion of industrial products. Chilton Company, 56th and Chestnut Streets, Philadelphia, Pennsylvania. 1960, 129 pages, \$5.

Zoning Primer by Martin J. Rody and Herbert H. Smith. This primer is a basic introduction to the principles and purposes of zoning, written specifically for the layman. It will be an invaluable guide for planning boards, zoning boards, governing bodies and civic groups. Chandler-Davis Publishing Company, P. O. Box 36, West Trenton, New Jersey. 1960, 48 pages, \$1.00.

AREA REPORTS

Techno-Economic Survey of Bihar. This techno-economic survey of Bihar is a pioneer attempt in India to appraise the resources of a particular state and their present utilization, and also to uncover potentials for further development. Since Bihar is not a closed economy but is part of the Indian politico-economic entity and industrial expansion cannot be planned merely by picking out the industries suitable for the state and developing them, the National Council succeeded admirably in arriving at realistic and practical suggestions for developing the state's economy. Asia Publishing House, New York, New York. 1959, 276 pages, \$17.50.

The Industrialization of Texas. A collection of reports covering a broad variety of businesses in Texas. Bureau of Business Research, College of Business Administration, The University of Texas, Austin, Texas. 1960, 50 pages, \$50.

Barriers to Trade Between Canada and the United States by Francis Masson and J. B. Whitely. This study attempts to summarize in as brief a compass as possible the barriers to trade between Canada and the United States and to provide some assessment of the restrictiveness of present levels of protection. One of the most striking features of the analysis is the variety and complexity of the methods used by each country to keep out the other's goods. National Planning Association and Private Planning Association of Canada, Montreal, Quebec, Canada. 1960, 97 pages, \$2.00.

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AIDC American Industrial Devel. Council
AIP American Institute of Planners
AMA American Management Association
ARDA American Railway Devel. Assn.
ASPCA Assn. of St. Plan & Devel. Officials
ASPO Amer. Society of Planning Officials
EEI Edison Elec. Inst. (Area Dev. Comm.)
GLSIDC Gt. Lakes Sts. Ind. Devel. Council
NIDA Northeastern Ind. Devel. Assn.
NIZC Natl. Industrial Zoning Committee
PNWIDC Pacific N.W. Ind. Devel. Council
SIDC Southern Industrial Devel. Council
SIR Society of Industrial Realtors
ULI Urban Land Institute



EXPANSION PLANNING INDEX

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Alabama Power Company, C. M. Kilian, Advertising Manager, 600 North 18th Street, Birmingham, Alabama. (Ad page 5)

Province of British Columbia, Department of Industrial Development, Trade and Commerce, Tom Sturges, Deputy Minister, Parliament Buildings, Victoria, British Columbia, Canada. (Ad page 39)

Burlington Industrial Commission, J. G. Blair, 2023 James Street, Burlington, Ontario, Canada. (Ad page 42)

Greater Burlington Industrial Corporation, Charles D. Townsend, Executive Director, 191 College Street, Burlington, Vermont. (Ad page 10)

City of Calgary, K. S. Ford, Industrial Coordinator, City Hall Annex, Calgary, Alberta, Canada. (Ad page 40)

Calgary Power Company, Ltd., E. H. Parsons, Director-Industrial Development, Box 190, Calgary, Alberta, Canada. (Ad page 39)

The Canadian Bank of Commerce, R. E. Hansplant, Executive Assistant Advertising, 10 Adelaide Street East, Toronto 1, Ontario, Canada. (Ad page 18)

Canadian National Railways, D. F. Purves, Chief of Development, 407 McGill Street, Montreal 1, Quebec, Canada. (Ad page 19)

Carolina Power and Light Company, D. E. Stewart, Manager-Area Development Department, Insurance Building, Raleigh, North Carolina. (Ad 3rd cover)

Chesapeake and Ohio Railway, Wayne C. Fletcher, Director-Industrial Development, 1103 C & O Building, Huntington, West Virginia. (Insert between pages 16 & 17)

Chicago, Rock Island and Pacific Railroad, P. J. Schmidt, Manager-Industrial Development, LaSalle Street Station, Chicago, Illinois. (Ad page 13)

City of Edmonton, John R. Munro, Industrial Director, City Hall, Edmonton, Alberta, Canada. (Ad page 46)

Gulf States Utilities Company, Joseph DeJean, Advertising Department, P. O. Box 2951, Beaumont, Texas. (Ad page 15)

Hanson and Hanson, Inc., James E. Hanson, 210 Main Street, Hackensack, New Jersey. (Ads pages 27, 28, & 29)

Mid-Western Ontario Development Association, Elmer Goebel, Director, 258 Ontario Street, Stratford, Ontario, Canada. (Ad page 41)

The Province of New Brunswick, Department of Industry and Development, John A. Paterson, Deputy Minister, P. O. Box 1150, Fredericton, New Brunswick. (Ad page 51)

New York Central System, Charles Warnick, 466 Lexington Avenue, New York, New York. (Ad 4th cover)

New York State Electric and Gas Corporation, E. W. Bartley, Manager-Industrial Development, 62 Henry Street, Binghamton, New York. (Ad page 43)

The Bank of Nova Scotia, Robert E. Oliver, 44 King Street, West, Toronto, Ontario, Canada. (Ad page 44)

The Province of Nova Scotia, Department of Trade and Industry, Michael Knight, Deputy Minister, Provincial Building, Halifax, Nova Scotia, Canada. (Ad page 45)

City of Oshawa Industrial Commission, T. E. McLaughlin, Industrial Commissioner, 50 Centre Street, Oshawa, Ontario, Canada. (Ad page 48)

Ottawa Industrial Commission, R. Bullock, Industrial Commissioner, Ottawa, Ontario, Canada. (Ad page 48)

Prince Georges County Industrial Development Commission, S. Walter Bogley, Jr., Executive Director, Chamber of Commerce Building, Hyattsville, Maryland. (Ad 2nd cover)

Puget Sound Power and Light Company, Stewart G. Neel, Manager-Area Development, 860 Stuart Building, Seattle 1, Washington. (Ad page 102)

Royal Bank of Canada, 360 St. James Street, West, Montreal, Quebec, Canada. (Ad page 37)

Province of Quebec, Provincial Publicity Bureau, Marc Hardy, Parliament Buildings, Quebec City, Quebec, Canada. (Ad page 35)

Province of Saskatchewan, Department of Industry and Information, Robert Tyre, Director of Publicity, Health and Welfare Building, Regina, Saskatchewan, Canada. (Ad page 47)

City of Saskatoon, S. G. Fawcett, Industrial Development Officer, City Hall, Saskatoon, Saskatchewan, Canada. (Ad page 51)

Shawinigan Water and Power Company, W. J. Lavigne, Manager, 600 Dorchester Street, West, Montreal, Quebec, Canada. (Ad page 49)

The South Carolina National Bank, Chauncey W. Lever, Vice President, Columbia, South Carolina. (Ad page 10)

Southern Canada Power Company, Mr. Kerouac, Advertising Manager, 1450 City Councilors Street, Montreal, Quebec, Canada. (Ad page 45)

Stratford Industrial Commission, Tom Flood, Industrial Commissioner, 51 Albert Street, Stratford, Ontario, Canada. (Ad page 52)

State of Tennessee, Department of Conservation and Commerce, George L. Benedict, Jr., Assistant Commissioner, Cordell Hull Building, Nashville, Tennessee. (Ad page 95)

Texas Power and Light Company, J. D. Eppright, Director of Industrial Development, P. O. Box 6331, Dallas 22, Texas. (Ad page 3)

Toledo Edison Company, Robert E. Johnson, Manager-Industrial Development Department, 420 Madison Avenue, Toledo, Ohio. (Ad page 71)

Union Electric Company, M. E. Skinner, Vice President and Director of Sales, 315 North Twelfth Boulevard, St. Louis, Missouri. (Ad page 73)

Walla Walla Port District, Mrs. Elva Bair, Office Manager, Post Office Box 124, Walla Walla, Washington. (Ad page 99)

State of Washington, Department of Commerce and Industrial Development, Sam Boddy, Director, General Administration Building, Olympia, Washington. (Ad page 97)

West Palm Beach Chamber of Commerce, Greg Marquez, 600 North Flagler Drive, West Palm Beach, Florida. (Ad page 5)

Woodstock Industrial Commission, H. N. Ubelacker, Industrial Commissioner, 6 Perry Street, Woodstock, Ontario, Canada. (Ad page 50)

PLANT CONSTRUCTION AND INDUSTRIAL SERVICES:

The Kinnear Manufacturing Company, Wallace Pearson, Vice President, 1191 Fields Avenue, Columbus 16, Ohio. (Ad page 4)

OTHER:

American Creosote Works, Inc., For: Waguespack, Pratt, Inc., S. B. Braselman, Jr., Vice President, 1305 Dublin Street, New Orleans, Louisiana. (Ad page 74)

CLASSIFIED ADVERTISEMENTS 102

PROFESSIONAL ADVERTISEMENTS 102 & 103

BRIEFS

(Continued from page 102)

have branches or plants in the Mount Vernon area.

At the end of the Spring, 1960, term the University of Virginia awarded the degree of Bachelor of Planning for the first time. The first two students to complete the five-year curriculum were Stanislaus J. Makielski, Jr., of Charlottesville, and J. Roy Saunders of Richmond.

The recently-formed Economic Development Agency of West Virginia has just issued the first of a series of planning tools designed by EDA to assist the state's cities in the preparation of a long-range economic development program. EDA Executive Director L. E. Ward, Jr., said he believed this is the first time that a map of an entire state has been published indicating the primary highway system, the Interstate Highway System, navigable waterways and other major streams, commercial airports, principal railroads together with interchange points, principal electric transmission lines with 33,000 kv or more, stream generating stations and electric transmission inter-connection points. The map is available upon request to EDA, Charleston 5, West Virginia.

An unusual and helpful service is offered to American businessmen contemplating a business trip to Britain by an organization headed by W. J. Shaw of Bakers Farm, Shipley, near Horsham, Sussex, England. Among the services are: A general exploration of the field in which you are interested, including arrangements for any necessary market research, collation of statistics from the Board of Trade and Government departments, the obtaining of reports from manufacturing or trade associations or chambers of commerce, the summarizing or regulations and import or export restrictions or duties, etc., which may be relevant to your business.

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There may be sound reasons why you should wish to obtain preliminary information on possible sites without revealing your interest or identity. Recognizing this, INDUSTRIAL DEVELOPMENT offers a Secret Site Service to readers who hold positions of responsibility with manufacturers or other business firms having a legitimate interest in sites. Complete information, including site specification forms, will be sent promptly and confidentially at your request. Address SECRET SITE SERVICE, Conway Publications, Inc., North Atlanta 19, Georgia.



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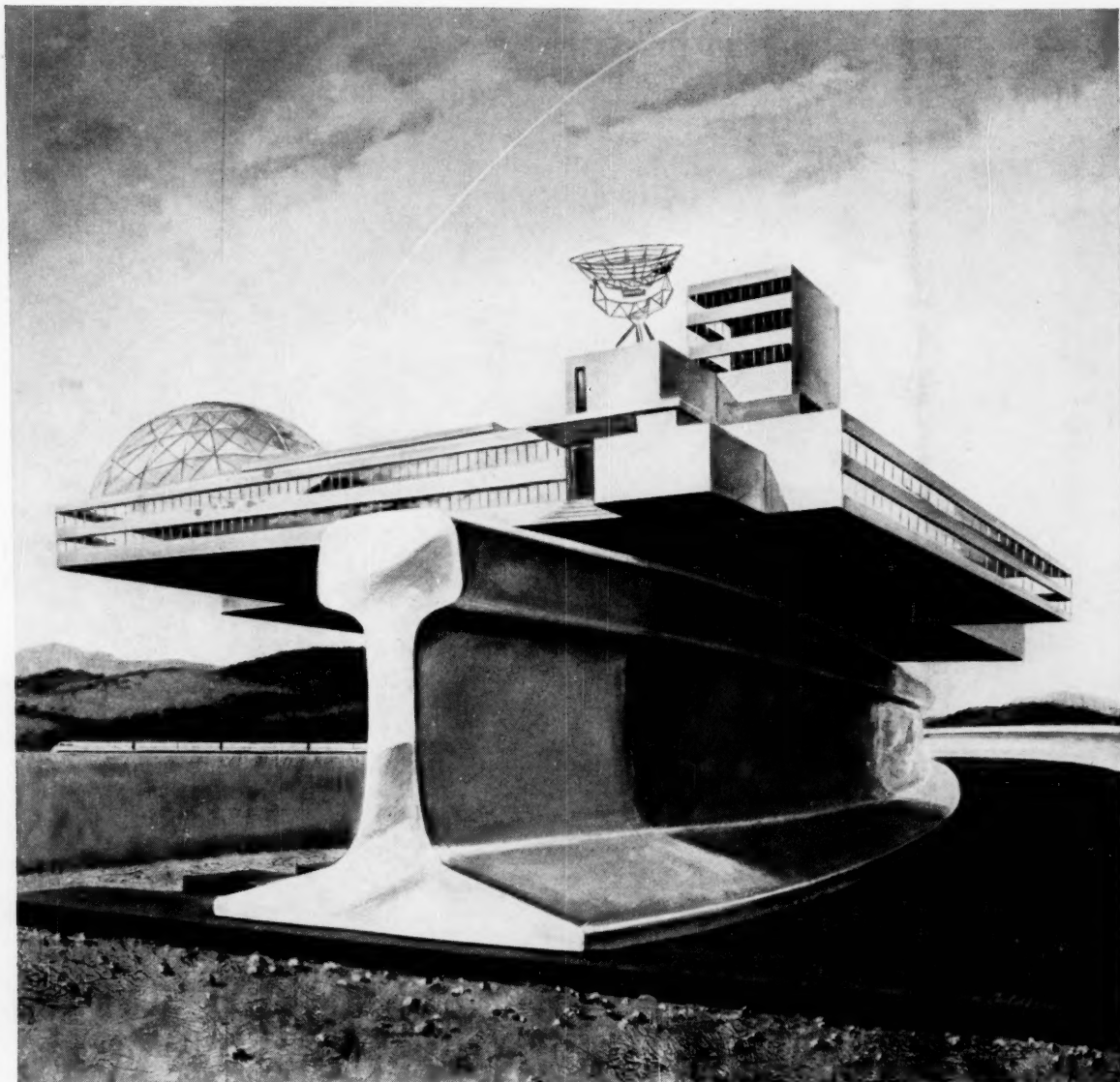
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